FAIR MARKET VALUE OF RADIO STATIONS

A Buyer's Guide

Second Edition

National Association of NAB BROADCASTERS

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A BUYER'S GUIDE

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Bruce Bishop Cheen

and

Mark R. Fratrik

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As you read this book, the authors caution you to keep in mind that the many rules, regulations, bank policies, economic conditions and market trends cited in this text are ever-changing realities. And while this book presents a "snapshot" of these interactive elements involved in determining the fair market value of a radio property, the reader should carefully check the status of these elements as they bear on your particular situation.

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Introduction:
Overview of Radio Broadcasting

For over half a century, radio has been a constant companion to just about everyone. Listeners choose from a wide variety of entertainment, music, information and personalities, 24-hours a day. Advertisers use radio as a cost effective way to reach millions of people nationwide, or just the folks on the east side of town. The people who work in radio enjoy the excitement of being a part of the "show-biz" atmosphere and the creative outlet it provides. Finally, station owners and managers are attracted by the prestige and the handsome profits that radio stations can generate.

"I heard it on the radio."

The Radio Advertising Bureau (RAB)[1] estimates that Americans average more than three hours of radio listening every day. During the average day, radio reaches 83.4% of all teenagers and adults, 61% of adults at work, and 77% of those driving in their cars. Over 64.2% of radio listening occurs away from home.

Over 99% of U.S. homes are radio-equipped, with an average of 5.5 radios in use per household. The number of working radio sets in the U.S. (by 1989) was 533 million, according to RAB estimates, with 343 million (64%) of them in homes and 190 million out of home. Nearly $2.7 billion worth of new radios were purchased in the U.S. in 1988.

For advertisers, radio provides a great opportunity to reach and motivate consumers -- with critical repetition -- during work and play, night and day. Radio commercials are considered extremely effective at inducing a purchase by a listener in a short amount of elapsed time. (Most parents of teenagers are familiar with this radio fact!)

The Business Behind the Box

Radio is a growth business that continues to meet the public's listening, advertising and investment needs. The industry is impressive in both its size and the extent of its business activity. Consider these 1989 radio facts:

- There were 10,631 radio stations operating in the United States by December 1989. Of these, 4,966 were commercial AMs, 4,251 were commercial FMs, and 1,414 were noncommercial FMs.[2]

- Radio advertising gross revenues in 1988 were $7.89 billion -- 23.3% of all commercial broadcast advertising revenues -- comprised of $382 million for national network, $1.40 billion for national non-network, and $6.11 billion for local.[3] Radio commercials cost from $1,000 or more in the top-five markets to as little as one dollar in small towns ("a-dollar-a-holler!").

- More than 900 radio stations were sold in 1988 with an aggregate purchase price of over $3.7 billion dollars. The average price for a station was slightly more than $4.1 million.[4]

Radio has always been an industry for opportunities, risks and challenges. The level and pace of radio station transactions suggests that the industry will continue to be competitive and attractive for new investors. However, there is no guarantee that anyone entering station ownership will be successful. In today's sophisticated marketplace, buyers need to be well informed about industry trends and the value of radio stations in order to make the best decisions for acquisition and operation.

How to Use This Book

This book is targeted at radio broadcasters including owners, buyers, sellers, lenders, managers and just about anyone who is interested in radio. From time to time you will find references to television facts and customs because many of the same people involved in the radio business are also involved in the full range of broadcasting. The general business principles are the same for each medium -- develop programming that the audience wants and generate revenues by selling commercial time. In that respect, anyone involved in the broadcasting industry should find this report of some interest.

The book is divided into three parts:

Chapters I-VI provide an overview of the radio broadcasting industry and operations including regulations, technical aspects, the radio economy and marketplace, new product developments, sources of revenue, station ratings, programming and promotion.

Chapters VII-XI discuss the financial aspects of acquiring a radio station, including the station search, acquisition strategies, sources of information, financial statements, station financing, tax implications, negotiations, and terms of the purchase.

Chapters XII-XVI outline a pricing model, based on financial analysis and comparable station sales, for determining the fair market value of a radio station. A hypothetical station is profiled and the model is applied. This may be the most useful part of the book for those who are serious about investing in a broadcast station. You do not have

to be a mathematical or financial wizard to follow the model and understand the results.

Hopefully, once you have read Chapters XII-XVI, you will develop your own financial model and apply it to your own station or potential acquisition. The parts of the book can be used individually to provide insight into and updates on the topics addressed. Each part, however, tends to build on concepts presented and discussed in previous chapters.

Chapter I:
Radio Ownership and Regulation

The Federal Communication Commission (FCC) is responsible for regulating the broadcast industry's activities in three general areas: 1) allocation of broadcasting frequencies among the various communications services; 2) assigning stations to operate on specific channels and frequencies; and 3) regulation of stations to insure that the operators are meeting existing FCC rules and guidelines for technical, operational and programming standards. Within this regulatory scope, the FCC also processes and approves requests to transfer control of broadcasting licenses from one party to another.

Broadcast stations are licensed to serve the public interest, convenience and necessity. The maximum term of a license for a radio station is seven years; the maximum term of a license for a television station is five years. At license renewal time, the FCC determines if the station has operated in the public interest by examining information supplied in the renewal application and assessing any "petitions," complaints, or competing applications filed at that time. All licensees must be legally, technically and financially qualified to operate a broadcast station. A broadcast license IS NOT a protected franchise. But while there are numerous cases of licenses not being renewed due to the owners or management committing serious violations of FCC regulations, the overwhelming majority of broadcast stations obtain renewal of their license.

Deregulation

Radio broadcasting has adjusted to the effects of a deregulatory policy that began in the 1970s, increased under the Reagan administration, and is still continuing. Deregulation has lightened the paperwork required by station owners, and frankly, placed additional responsibilities on those who would challenge a station's license renewal. In 1982, the term of a license was extended from three years to seven years, thus insuring more stability for radio station owners.

In addition, the FCC reduced limitations on the term that owners had to operate a station before it could be sold. Up until late 1983, the minimum holding period was three years before the station could be sold at a profit. Owners had to file for a "distress sale" in order to divest themselves before the three-year minimum, and could only sell the station for an amount equal to or less than the costs incurred during acquisition and operation. Profit was not allowed in a distress situation. The FCC abolished the minimum holding period so that stations are now freely bought and sold without any limitations on profits and holding period.

Financial qualification rules have also been deregulated. Prior to 1981, the buyer of a station had to document the availability of funds by submitting loan commitment letters, stock subscription agreements, complete financial statements, etc., to the FCC for approval. Such extensive documentation is no longer required to be filed with the station application but the buyer must still certify that funds will be available. However, the FCC may still require full financial disclosure of any prospective buyer.

Numerous other technical and administrative regulations were eliminated or relaxed under FCC Chairman Mark Fowler and his successor Dennis Patrick. Deregulation of broadcasting was a prime goal of Chairman Fowler when he was appointed by President Reagan in 1981. In the process, the Fowler Commission staff estimated that it reduced the broadcast industry's annual paperwork burden from 33.5 million hours to about six million.[1]

One of the most controversial deregulation moves concerned raising the limits on the number of commercial broadcast stations that a single entity may own. Under the old "rule-of-sevens," a single entity could not have controlling interest in more than 21 broadcast stations -- seven TVs, seven AMs and seven FMs. The FCC adopted the old 7-7-7 limitation in 1953 when the number of radio and television stations was a fraction of today's amount. In 1953 there were only 199 licensed TV stations, 2,458 AMs and 686 FMs,[2] compared to today's 1,436 TV stations, 4,966 AMs and 5,665 FMs. By April 1985, the FCC had fully enacted a new "rule-of-twelves" raising the limits to 12 TVs, 12 AMs and 12 FMs. Broadcast groups can own 14 of each medium if at least two of each are minority controlled.

The debate continues on the effect of the new multiple ownership rules on the industry. Critics fear that the higher ownership limits will encourage the disappearance of small, independent broadcasting operations and concentrate control of news and programming in the hands of a few corporations. The FCC counters that a limit of 36 stations per owning entity means greater resources devoted to news and public affairs programming from corporations with more to spend on a larger scale of operations. Using traditional measures, there appears to be little concentration of ownership in the broadcasting industry.[3] (By comparison with the broadcast industry, the cable industry has a greater concentration of ownership, with the top 10 Multiple System Operators (MSO) owning over 56% of cable franchises.)[4]

Since 1986 the FCC has relaxed portions of two local multiple ownership rules, the "duopoly" rule and the "one-to-a-market" rule.[5] The radio duopoly rule prohibits ownership of two commercial AM or two commercial FM stations if there is overlap of the minimum signal strengths that the stations are required to place over their community of license. The Commission amended this rule to allow a greater degree of overlap between commonly owned stations. Thus, stations located closer to each other can now be owned by the same company. The one-to-a-market rule prohibited the common ownership of commercial radio and television stations in the same market except for several grandfathered combinations that were allowed to continue. AM stations can now be co-owned with television stations in the largest markets that have a certain level of "independent voices." Station owners taking advantage

of these new types of cross-ownership can now enjoy the economies afforded only previously to AM-FM station cross-ownership.

Impact of Less Regulation

Many industry analysts believe that higher ownership limits greatly contributed to the broadcast bonanza of high priced acquisitions and mergers since 1985. A healthy economy and lower interest rates also helped create the climate for these mergers and acquisitions. An indication of the financial health of the industry is seen in the prices of publicly traded broadcast stocks. From late December 1984 through August 1989, the stock performance of major media companies with broadcast and cable holdings, tracked by Paul Kagan Associates, outperformed the overall stock market. During that time, the media composite stock index advanced 216% while the Dow Jones Industrial Average advanced only 126%.[6]

Brokers and group owners agree that the higher ownership limits benefit expansion-minded operators who want to upgrade into larger markets while, at the same time, still hang onto their good performers in smaller markets. Possible economies of scale also inspire some group owners to pick up more stations in order to strike better deals with program suppliers and advertisers interested in package rates. There are also obvious savings in equipment and supplies for large group stations.

Under the old FCC limits some of the industry's richest potential buyers remained handcuffed. In 1984, Thomas S. Murphy, Chairman of Capital Cities Communications (now CapCities/ABC) expressed an interest in the acquisition of major market stations, especially in the sunbelt, as soon as the FCC ownership limits were raised.[7] Immediately after the ownership deregulation the most notable effect was in the 20th to 50th largest markets. For example, of the 14 stations that were first involved in going over the "rule of sevens", only three were in the top 10 markets and seven were in the 20th to 50th market range.[8]

The consensus is that the volume of station transactions will continue to depend mostly on economic factors such as radio advertising revenues, stations' performances, station prices, inflation, and interest rates.

Station Transactions

As stations continue to appreciate in value and as more buyers are attracted to the industry, broadcasting has become what is known in real estate as a "seller's market." The most recent year, 1989 saw a downturn in the number of radio stations changing hands. During that year, there were 663 stations sold, lower than the 845 sold in 1988. Radio-only sales accounted for $1.149 billion -- the lowest it has been in five years. With the decrease in the dollar volume of stations sold also came a decrease in average price per radio station -- $1.7

million in 1989 -- down from 1988's value of $2.2 million and slightly higher than the 1987's value of $1.6 million.[9]

Figure I-1 summarizes a 36-year period (1954-1989) of broadcast station transactions.[10]

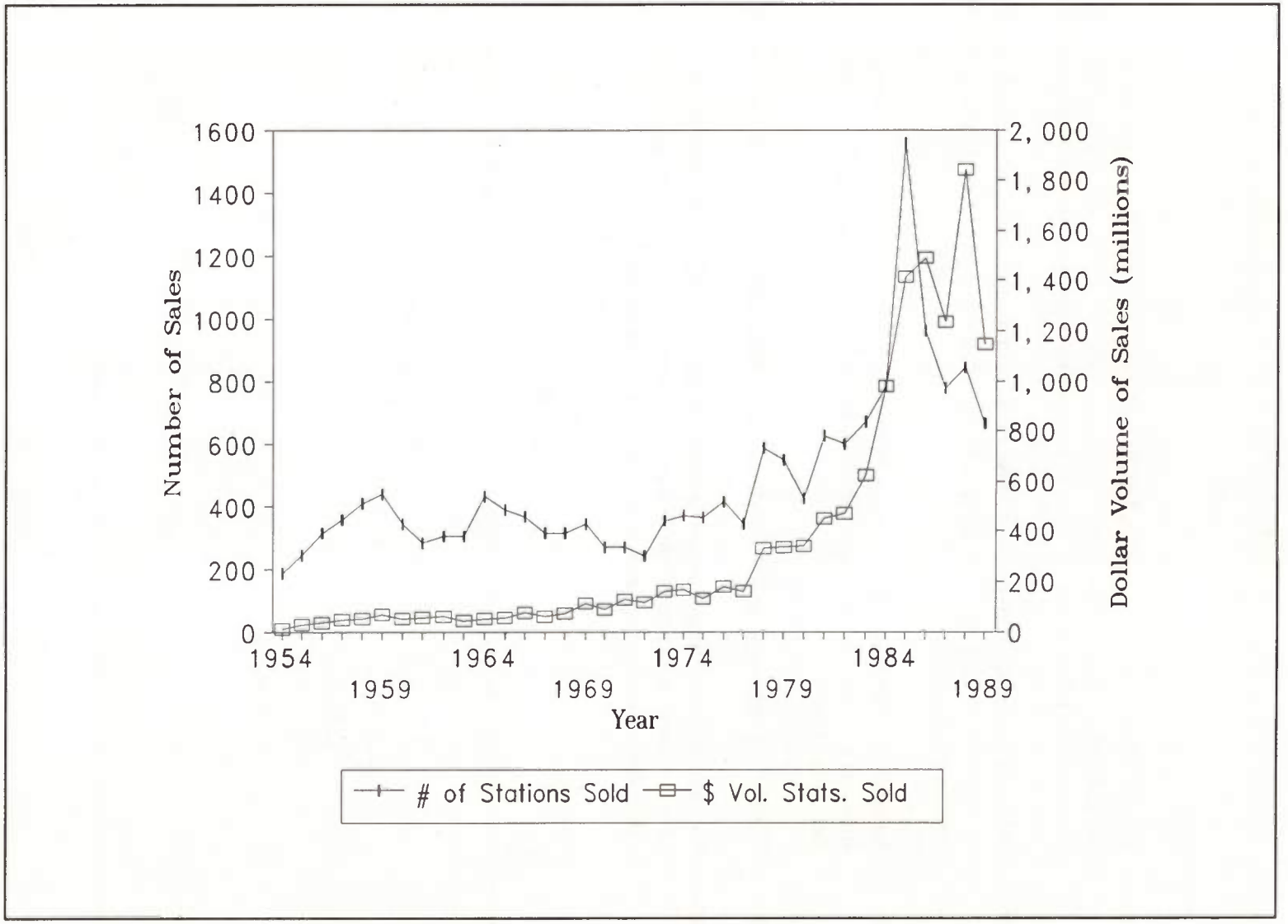
How have values of stations changed in the past few years? Table I-1 shows the results of a study on resale value of radio stations sold between 1985 and 1987. The study was published in *Radio Station Transfers 1988*, and prepared by David Schutz, managing director of Hoffman - Schutz Media Capital, Inc., a New York-based investment banking firm. The research reviewed 2,300 transactions and selected data on 703 of those. The stations excluded involved partial sales, multiple station sales, sales of stations held by the seller for more than 12 years, and first-time sales.

The findings show that 65% of the 703 stations examined sold at a profit, 32% sold at a loss, and 3% sold at their previous price. All stations increased in value (compounded annually) an average of 10%, FM stand-alone stations increased an average of 20% , while AM/FM combinations increased an average of 18%. AM stand-alones showed an average 4% drop in value. In general, after an average holding period of 4.7 years and value increasing by 10% each year, radio stations sold between 1985 and 1987 for 50% more than their sellers paid for the stations.

Table I-1
Resale Value of Radio Stations

	Station Types			
	AM-Only	FM-Only	AM/FM	All
Resold at Higher Price (#)	122	135	202	459
Resold at Lower Price (#)	154	28	43	225
Resold at the Same Price (#)	10	2	7	19
Average Ownership Period (years)	4.8	4.3	4.8	4.7
Average Annual (Compounded) Change	-4%	+20%	+18%	+10%
Median Annual (Compounded) Change	-2%	+17%	+11%	+7%

Figure I-1
Dollar Volume and Number of Radio Stations Sold, 1954-1989



Summary

- The FCC licenses radio and television stations to operate on specific frequencies for the public's interest, convenience and necessity. Licenses are renewable by the owners, provided that they meet FCC technical, ownership and programming standards.

- FCC deregulation of multiple station ownership limits -- from seven AM and seven FM to 12 AM and 12 FM -- has helped to increase the number and selling prices of radio station transactions.

- Relatively stable interest rates, a better economy and the consistent ability of radio stations to generate revenues are key factors in the increased investment activity in radio stations.

- 1988 was a record year for the dollar value of radio stations changing hands.

- In general, radio stations sold between 1985 and 1987 for 50% more than their sellers paid for the stations, after an average holding period of 4.7 years. FMs led in station value appreciation, followed by AM/FM combinations.

Chapter II:
Technical Aspects of Radio Signals

AM and FM radio broadcasting use two distinctly different technical systems. The oldest, Amplitude Modulation (AM) uses the frequencies between 540 and 1600 kilohertz (kHz) soon to be extended to 1710 kHz. Frequency Modulation (FM) utilizes the radio band between 88 and 108 megahertz (mHz). The prospective station owner should be aware of the technological differences between AM and FM and the impact that these have on station coverage. Coverage refers to the geographic area that a station's signal reaches regardless of who might be listening. TV and FM coverage patterns are normally circular, although the FCC has recently authorized the use of FM directional antennas that result in non-circular coverage patterns. AM patterns are often kidney shaped and vary tremendously with each station.

AM Coverage

AM station coverage patterns vary greatly depending on the time of day or night and the terrain. During daylight hours the earth's upper atmosphere absorbs most of the skyward portion of an AM signal. In most instances this means that a station's maximum signal coverage is restricted to its ground wave, which usually travels no more than 200 miles from its source. Multiple stations can share the same frequency with only a few hundred miles of physical separation between them. After sunset, however, the ionosphere begins to reflect the radio signals. A station's signal is bounced back down to the earth's surface at points several hundred or even thousands of miles away from the transmitter. In order to prevent interference between stations at night, a number of AM stations must do one or more of the following after dark: 1) reduce power; 2) use a series of directional antennae to eliminate signals that would travel toward another station; or 3) cease broadcasting entirely. Many AM stations fall into the last category and must cease all operations during the nighttime hours. These stations are referred to as "daytimers."

The precise number of hours that a daytime station may broadcast is determined by the season of the year. During the early summer, the station would typically operate from 6:00 a.m. to 8:30 p.m. The hours of operation gradually decrease during the fall until they reach a low point in December, when daylight hours -- 8:00 a.m. to 4:30 p.m. -- significantly restrict operations. Unfortunately, radio stations derive the largest portion of their revenues during the fourth quarter of the year due to holiday advertising. A daytime station would thus be handicapped during this portion of the year. Of course, in some markets, mostly small, where all the local stations are daytimers, none of the stations enjoys a unique advantage. On the

other hand, in a large multi-station market with many fulltime stations, a daytimer would be at a disadvantage.

Many daytimers have pre-sunrise and post-sunset authorization which extends the hours of operation though at reduced transmitting power. In recent years, many more daytimers have been allowed to broadcast during the night at reduced power.

Now in the experimental stage is new transmission equipment technology that can send highly directional signal patterns to avoid signal overlap on a particular frequency. However, the FCC has not significantly altered its regulations on directional signals. Additionally, the industry, through the efforts of the National Association Broadcasters (NAB), is working to develop improved AM antenna systems that will reduce interference among stations.

Another new technology increasingly adopted by many AM stations is stereo transmission. In 1982 the FCC decided not to select one stereo transmission standard and let the marketplace decide among several AM stereo standards. Some have argued that by not selecting a standard, the FCC held up the acceptance of this new technology by both radio stations and receiver manufacturers. Whether that is true or not, more AM stations are now broadcasting in stereo and more receivers are able to receive those stereo signals.

In AM radio, a station's frequency, or dial position, has a crucial impact upon the size of the station's overall coverage area. There are two reasons for this. First, the lower the frequency of the station, the farther its signals will tend to travel for a given transmitter power level. Thus, if two stations have the same power output, the one with the lower dial position will have better coverage, everything else being equal. The greater coverage may translate into greater audience share and advertising revenue potential. Receiver design also impacts the advantage of one AM frequency over another. On some AM radio receivers there is more space devoted to the frequencies in the lower end of the dial, such as 550, 620, 710, etc., compared to the frequencies at the upper end, such as 1450, 1550 and 1590. On those radios, the average listener finds it easier to tune in the signals of the stations with lower frequencies. These stations are perceived as stronger, or louder, on the dial. Therefore, many AM station owners prefer a dial position lower than 1300.

Finally, transmitter location is important for AM stations. A low watery area provides good ground conductivity for the signal. In contrast, for FM stations, antenna location is not important, except for the location's height. The higher the antenna, the better, since for FMs, line of sight transmission to the entire coverage area is very important.

The FCC groups AM stations into four classes of frequencies according to their coverage characteristics. These classes of frequencies have many different station types. Class I stations operate on "clear" channels, meaning that they share the channel with only one or two other stations in the country. Class I stations serve large metropolitan or rural areas and have very powerful signals (maximum operating power of 50,000 watts) that, at night, can be

received literally hundreds of miles away. Class II stations are similar to Class I stations in terms of power and coverage, although they must direct their signals at night. Class III stations operate with a maximum of 5,000 watts and share "regional" channels with many other stations. Some must cease operations at night and are known as "daytimers." Class IV stations cover a small service area and operate with a maximum power of 1,000 watts during the day and only 250 watts at night. They share "local" channels with other fulltime Class IV stations. Table II-1 lists the technical classifications of AM stations as proscribed by the FCC.

Table II-1
Signal and Coverage Classes of AM Stations

Class	Power (Max.)	Characteristics
I	50 kW	Clear channels (45 in U.S.), with one or two stations on each channel, serving large metro centers and remote rural areas. Most clears have great nighttime signal penetration with a skywave traveling 700 miles or more. There are a few daytime only stations in this class.
II	50 kW	Secondary stations on 29 clear channels and separated from primary clear channel frequencies so as to limit interference with Class I stations. Most use directional antennas at night. Some in this class are daytime only stations.
III	5 kW	Share 41 Regional Channels with over 2,000, other "fulltime" and "daytime only" Class III stations.
IV	1 kW	Operate on six Local Channels. Limited power covers a small service area. Some stations near U.S. borders must lower power at night.

FM Coverage

The technical aspects of FM are less complex than for AM. First, the frequencies used for FM are not subject to reflection by the ionosphere. Therefore, all FM stations are licensed for fulltime operation. There are no FM daytimers. Also, at present there are no complicated directional antennas, as are commonly used in AM, because the FCC licenses FM stations on the basis of simple mileage separations between stations. The Commission has authorized limited use of directional antennas by FM stations. FM signals are static free and have excellent obstruction penetration capability. They can be received in places where AM signals cannot penetrate -- such as steel and concrete buildings. However, tall obstructions such as skyscrapers, hills and mountains can adversely affect the reception of FM because FM signals tend to travel along a relatively straight path in a line of sight manner. Therefore, the size of the coverage area of an FM station is directly related to the height of its antenna and its power

output. Further, FM signals do face the problem of multipath distortion, especially for listeners in automobiles, where reflected signals cancel each other, resulting in periodic loss of audio. Finally, the stereo coverage area for an FM station is smaller than the station monophonic coverage area. Figure II-1 illustrates the properties of AM and FM signals and how they are affected by obstructions and the ionosphere.

FM signals also have the ability to be split into three separate carrier components for creating the left and right audio channels (stereo), and one channel called the subsidiary communications authorization (SCA), or subcarrier, which can transmit music, voice or digital data separate from the signals carried on the left and right audio channels. This subcarrier channel that is often leased out as an additional revenue source to suppliers, such as MUZAK, programming background music for waiting rooms and elevators. Other SCA users include local utility companies, banks and other services transmitting digital data for communication. The SCA cannot be picked up on a regular receiver and requires special decoding hardware.

Frequencies for FM stations are listed by community in Tables of Assignments contained in the FCC's rules. (They are also found in the *Broadcasting-Cable Yearbook*.) Applications for new stations can be filed only for frequencies listed in these tables. Frequencies for AM stations are not assigned to communities in Tables of Assignments the way FM and TV are. An FM signal has the same properties as a TV signal; its strength depends on power and antenna height. In actuality, the audio for television is an FM signal. TV stations and FM stations often share the same towers, preferably in or very near the population core of the market.

The FCC has four main classes of frequencies for FM stations -- A,B,C and D. Class A stations may operate with power from 100 to 6,000 watts and are restricted to antennas of no more than 328 feet in height above average terrain (HAAT). They are intended principally to serve smaller communities and have a coverage radius of about 15 miles. Class B stations may operate to 50 kilowatts (kW) with a maximum antenna height of 492 feet. A new class of stations, B1, operates at a slightly lower power, 25 kW, and lower maximum antenna height, 328 feet. Class C stations are intended to serve not only the community of license but also a large surrounding area. This class of stations is further classified into four groups: C, C1, C2, and C3. These subgroups are differentiated by the maximum power and maximum antenna height allowed. Those values range from 100 kW and 1,968 feet for Class C stations to 25 kW and 328 feet for C3 stations. Finally, a few remaining Class D stations operate with up to 100 watts of power in the portion of the FM band between 88 and 92 mHz, which is reserved for noncommercial, educational and public broadcasting.

Some stations constructed prior to 1962 are permitted to operate by the FCC at higher power levels and at higher or lower heights on a "grandfathered" basis. Also, the FCC has recently revised its policies to provide greater flexibility to assign Class B and C channels to smaller communities and Class A channels to larger communities.

Figure II-1
AM and FM Signals

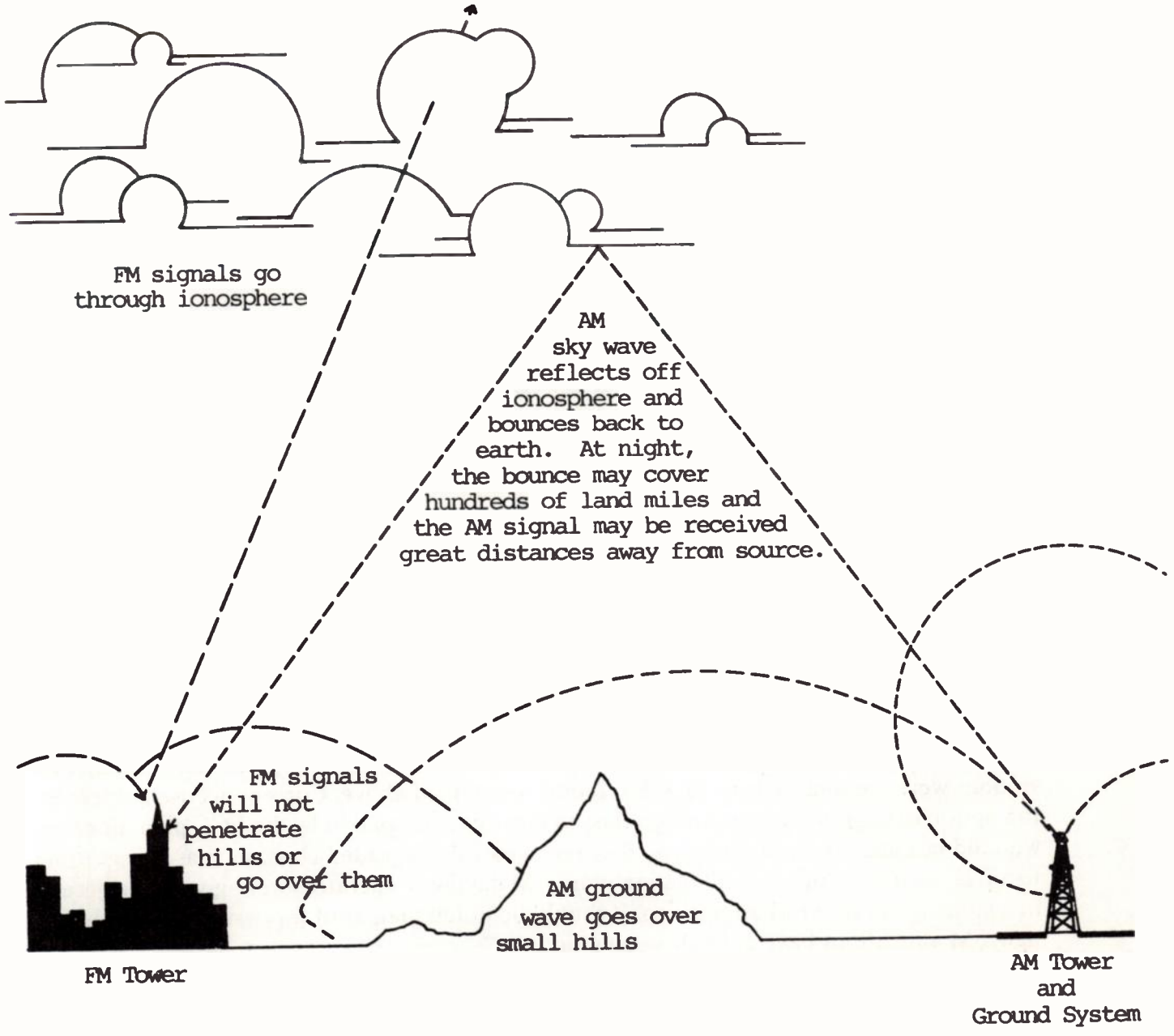


Table II-2 provides a summary of the various technical classifications of FM stations as generally established by the FCC.

Table II-2
Signal and Coverage Classes of Commercial FM Stations

Class	Power (Max kW)	Maximum Height (Feet)	Primary Service Areas (Miles)
A	6	328	15-18
B	50	492	32
B^1	25	328	25
C	100	1968	57
C^1	100	980	45
C^2	50	492	32
C^3	25	328	25

New FM Allocations

In 1984, the FCC proposed creating new FM channels to serve almost 700 communities in mostly small and/or rural markets. The proposal reduced FM mileage separation requirements for adjacent and co-channel FM assignments. From this plan, new classes of FM stations were created such as B1, C1, C2, etc., mentioned above. Current license holders had the option to upgrade their coverage class in the areas designated by the FCC plan. For those who did not improve their facilities, they received a downgraded class, such as going from C to a C1. As part of this new allocation plan, AM daytimer operators were given a preference in acquiring the new FM allocations. It should be noted that, as of this writing, several of the new FM allocations have actually been granted.

Coverage Implications

Station owners should have a clear understanding of the basic technical aspects of AM and FM stations and how the technology will impact station investments. Operating power has a particularly significant impact on the value of an FM station. The prospective owner must be fully aware of the kind of signal coverage the station has, and at the very least, study the station's coverage map and verify that it is accurate.

The best advice is to have a qualified engineer thoroughly check all technical aspects of any proposed station before the deal is signed. Beware of a situation where the present owner says that the power can be upgraded, the tower can be moved, or the antenna height can be increased. Do not believe claims that the owner can go fulltime on an AM facility by making a minor change in application to the FCC.

Another area of caution involves the amount of real estate used for the transmitter and tower site. If the station is leasing the land, the term of the lease is very important. It may be extremely difficult, if not impossible, to find another site should the station have to move. This is especially true for directional AM antennas, where there may be multiple towers involved and a very limited number of areas appropriate for relocation.

The most successful programming will be jeopardized if technical capabilities to deliver it are limited. The technical consultant should examine all facilities and equipment, including the studio and control room. Unfortunately, too many owners let the facilities and hardware decline once they have decided to sell the station. When replacing equipment, it is advisable to go with the proven industry standards.

A station's future growth and success depends heavily on a competitive signal and coverage. All things being equal (and they never are), the best signal wins. Buyers are willing to gamble on format changes and more promotion, depressed markets and potential growth markets, stations with no ratings and revenue history, and on construction permits for a new channel. However, the one risk that a smart buyer will never go for is a signal problem that cannot be fixed. It will considerably lower the value of the station.

Receiver Improvements

While the buyer of the station should be fully informed about the signal transmitted by the station being purchased, they need to also keep up with improvements in receiver technology. No matter how well a signal is transmitted, if quality receivers are not available, it will all be for naught.

The broadcasting industry has been working closely with the receiver industry through the National Receiver System Committee (NRSC) to improve the quality of the sound from

receivers. Their proposed transmission standard NRSC-2 has recently been adopted as the required standard for AM stations, with stations able to meet this standard, at least on an interim basis, by compliance with a less rigorous NRSC-1 requirement. The NRSC is looking into changes that would further improve the sound quality of both AM and FM stations heard on receivers.

Summary

- AM radio -- amplitude modulation -- is the original radio service and operates between 540 and 1600 kHz, and soon up to 1710 kHz. Signal coverage varies from small market "daytimer" stations to 50 kW "clear channel" stations that are powerful enough to be heard several hundred miles away.

- FM radio -- frequency modulation -- operates at between 88 and 108 mHz. Signal coverage varies by station class restricting their antenna height and maximum power.

- An AM station's coverage pattern may be directional or non-directional depending on the frequency on which it operates and its effect on adjacent channel and co-channel stations. The terrain of the transmitter location, the ionosphere and the station's dial position are the major factors affecting AM groundwave and skywave coverage. At night, the upper atmosphere reflects AM signals back to earth helping to bounce AM signals hundreds of miles from the transmitter.

- An FM station's coverage pattern is line of sight and is not subject to reflection by the ionosphere. Large obstructions, such as mountains and tall buildings, interfere with FM signals unless the FM antenna is mounted on a relatively tall tower or building. Transmission power and antenna height are the key factors affecting FM signal coverage. The most powerful FM signals cover only a fraction of the area of the most powerful AM signals. Thus in many respects, AM coverage is better than FM.

- FM signals are wider than AM signals and therefore have the power to split into three components -- two for stereo multiplex and one subcarrier for special data. AM signals are also capable of stereo and subcarrier transmissions, but capacity for sound quality is not quite as good as that of FM signals.

- Many more AM stations are transmitting in stereo while more receivers are capable of receiving those stereo signals.

- A competitive signal and coverage is crucial to the success of any commercial broadcast radio station. A prospective station buyer should get the best professional evaluation of the station's signal since some signal problems cannot be remedied.

- The FCC is in the process of licensing about 700 new FM stations. Owners of daytime only AM stations will have a priority in being awarded the new FM station licenses.

- The broadcasting industry is working with the receiver manufacturing industry to improve the quality of receivers.

Chapter III:
The Competitive Economy

Broadcasting became a very popular investment in the 1980s because of the ability of broadcast properties to appreciate in value and to generate large amounts of cash. In general, the relatively fixed supply of broadcast stations, coupled with the increased demand for broadcast communications, created a situation where broadcast station values rose, especially in major markets. The bandwidth in the largest markets is saturated with broadcast stations and there are no new allocations available. High pre-tax cash flows are capable of supporting a lot of debt which gives broadcast companies tremendous financial flexibility, especially at a time when interest rates are low.

A late 1988 report by the New York based investment banking firm of Veronis, Suhler & Associates (VS&A) compared the performance of public companies in the radio and television industries with other communications industries for the years 1983-1987. Television and Radio broadcasting ranked in the middle as measured by most financial indicators. For example, television and radio broadcasting ranked fourth of nine industries in operating cash flow margins with a 1987 average of 21.1%.[1]

VS&A sees growth in the radio industry as remaining on a steady path, with station revenues increasing 10% annually for the next five years. Television station revenues should increase at a slightly faster pace, 12.7%. Table III-1 summarizes some financial ratios for the publicly held companies that have: 1) only radio holdings; 2) only television holding; and 3) own both radio and television holdings.

Advertising is the fuel of broadcasting in a consumer economy and it has been rising as a percentage of gross national product (GNP). In 1975, total media advertising expenditures accounted for about 1.8% of GNP. Ten years later (1985), total advertising expenditures were estimated to be about 2.35%. In 1989, that value reached 2.42% of GNP. In other words, for every additional dollar added to GNP, two and a half cents went into advertising. Therefore, if a commercial broadcast station has a stable cost base while GNP rises, the station enjoys "a free ride." At the same time, broadcasting performs well during soft economic cycles and high inflation. Broadcasters have been able to withstand cost increases by raising their advertising rates.

Table III-1
Publicly Reporting Radio and TV Companies
($000,000)

	Radio Broadcasting Companies	Television Broadcasting Companies	Combined TV & Radio Broadcasting Companies
Revenues (1987)	$542.4	$4,018.6	$10,990.5
Compounded Annual Growth (1983-1987)	32.7%	22.5%	5.7%
Pre-tax Operating Income (1987)	$68.1	$788.1	$1,625.0
Margin (1987)	12.6%	19.6%	14.8%
Compounded Annual Growth (1983-1987)	17.5%	11.0%	10.1%
Cash Flow	$139.3	$1,112.5	$2,025.9
Margin (1987)	25.7%	27.7%	18.4%
Compounded Annual Growth (1983-1987)	32.6%	16.6%	9.6%

The Radio Economy

Although radio's financial health has weathered periods of high inflation, radio is not immune to economic cycles. Historical declines in the radio industry's gross income coincide with the nation's economic recessions of 1974-1975 and 1979-1980. Table III-2 shows the nationwide trend in revenues, expenses and pre-tax profit margins of a typical radio station from 1973 through 1983. The data is based on annual surveys of all types of commercial radio stations that were conducted by the NAB. The revenue figures are "net" after payment of commissions to advertising agencies and station representatives. The expenses are pre-tax and include interest and depreciation.

The data is much too broad to be used as a yardstick for any individual station. In addition, the sample used in these surveys is not the same from year to year. However, the data from 1978 through 1982 does indicate that profit margins were getting thinner for radio, as expenses increased at a faster rate compared to revenues.

Table III-2
Revenues, Expenses, Income and Profit Margin
Radio Station Nationwide ($000)
1973-1983

Year	Net Revenues	Percent Change	Total Expenses	Percent Change	Pre-Tax Profits	Percent Change	Profit Margin
1983	$587.1	8.3%	$544.3	10.8%	$42.8	-16.2%	7.29%
1982	$542.3	18.5%	$491.2	11.2%	$51.1	223.4%	9.42%
1981	$457.6	21.5%	$441.8	22.4%	$15.8	1.3%	3.45%
1980	$376.6	8.8%	$361.0	10.7%	$15.6	-21.6%	4.14%
1979	$346.0	7.7%	$326.1	10.6%	$19.9	-24.6%	5.75%
1978	$321.3	19.4%	$294.9	17.9%	$26.4	40.4%	8.22%
1977	$269.0	12.1%	$250.2	12.9%	$18.8	2.7%	6.99%
1976	$239.9	16.8%	$221.6	12.7%	$18.3	108.0%	7.63%
1975	$205.4	11.4%	$196.6	12.8%	$8.8	-12.0%	4.28%
1974	$184.3	7.6%	$174.3	7.8%	$10.0	4.2%	5.43%
1973	$171.3	NA	$161.7	NA	$9.6	NA	5.60%
Compounded Average Annual Growth:							
1973-1983		13.1%		12.9%		16.1%	
All revenues are net of ad agency and rep commissions. All expenses are pre-tax and include depreciation and interest.							

In recent years, the NAB, with the help of the Broadcast Financial Management Association (BFM) and the accounting firm Price Waterhouse, has made improvements in these reports. Unfortunately, due to these improvements, comparisons of the most recent years cannot be made with the earlier years already shown. Table III-3 provides the revenues, expenses and pre-tax profits for the different types of stations for the years 1986-1988.

The present situation for radio stations is far from gloomy. Much of the earlier period's (1973-1983) declining profits and rapidly increasing expenses can be attributed to higher interest rates during the late 1970s and early 1980s. During the late 1970s, many radio station deals were put together with interest rates tied to the prime rate -- which was not so bad at only 10%, but potentially bankrupting at 20%!

Table III-3
Revenues, Expenses, Income and Profit Margin
Radio Station Nationwide ($000)
1986-1988

	1986 Average	1987 Average	1988 Average	Average Annual Change
Daytime AM Stations				
Net Revenue	$261	$203	$244	-3.4%
Total Expenses	$269	$195	$228	-7.8%
Pre-Tax Profit	($8)	$8	$15	N/A
Cash Flow	$32	$36	$54	30.8%
Fulltime AM Stations				
Net Revenue	$1,038	$1,020	$874	-8.3%
Total Expenses	$982	$966	$788	-10.4%
Pre-Tax Profit	$56	$54	$85	23.5%
Cash Flow	$153	$172	$174	6.5%
AM/FM Stations				
Net Revenue	$1,254	$1,224	$1,222	-1.3%
Total Expenses	$1,189	$1,203	$1,157	-1.4%
Pre-Tax Profit	$65	$21	$65	0.2%
Cash Flow	$256	$243	$290	6.4%
FM Stations				
Net Revenue	$1,245	$1,330	$1,333	3.5%
Total Expenses	$1,162	$1,250	$1,226	2.7%
Pre-Tax Profit	$83	$80	$107	13.6%
Cash Flow	$252	$291	$321	12.9%

Radio revenues continue to show steady growth performance, according to the RAB estimates. Average compounded annual growth for radio was 9.5% over the ten year period, from 1980 through 1989. Average annual revenue growth for all advertising media for the same period was 9.2%, slightly behind radio. Radio and all media advertising revenues grew faster than the U.S. GNP growth rate of only 7.3% for the same ten year period.

It should be noted that radio revenue is also a function of inflation. From 1974 through 1983, when radio revenue grew at almost a 12% compounded annual average, high inflation rates were helping to raise the cost of advertising. If current annual inflation rates continue to stay low, at between 3% to 5% through 1990, radio revenue growth would most likely stay below a double digit performance rate. But, in what economists refer to as real growth (after accounting for inflation), radio advertising growth is faring just as well now as in the early 1980s.

Radio's growing strength as a local advertising medium can be found in its recent relationship with respect to the level of retail sales. In the 1980s, local market radio revenues have averaged .35-.37% of local retail sales for over 200 markets studied.[2]

Staffing, Salaries and Operations

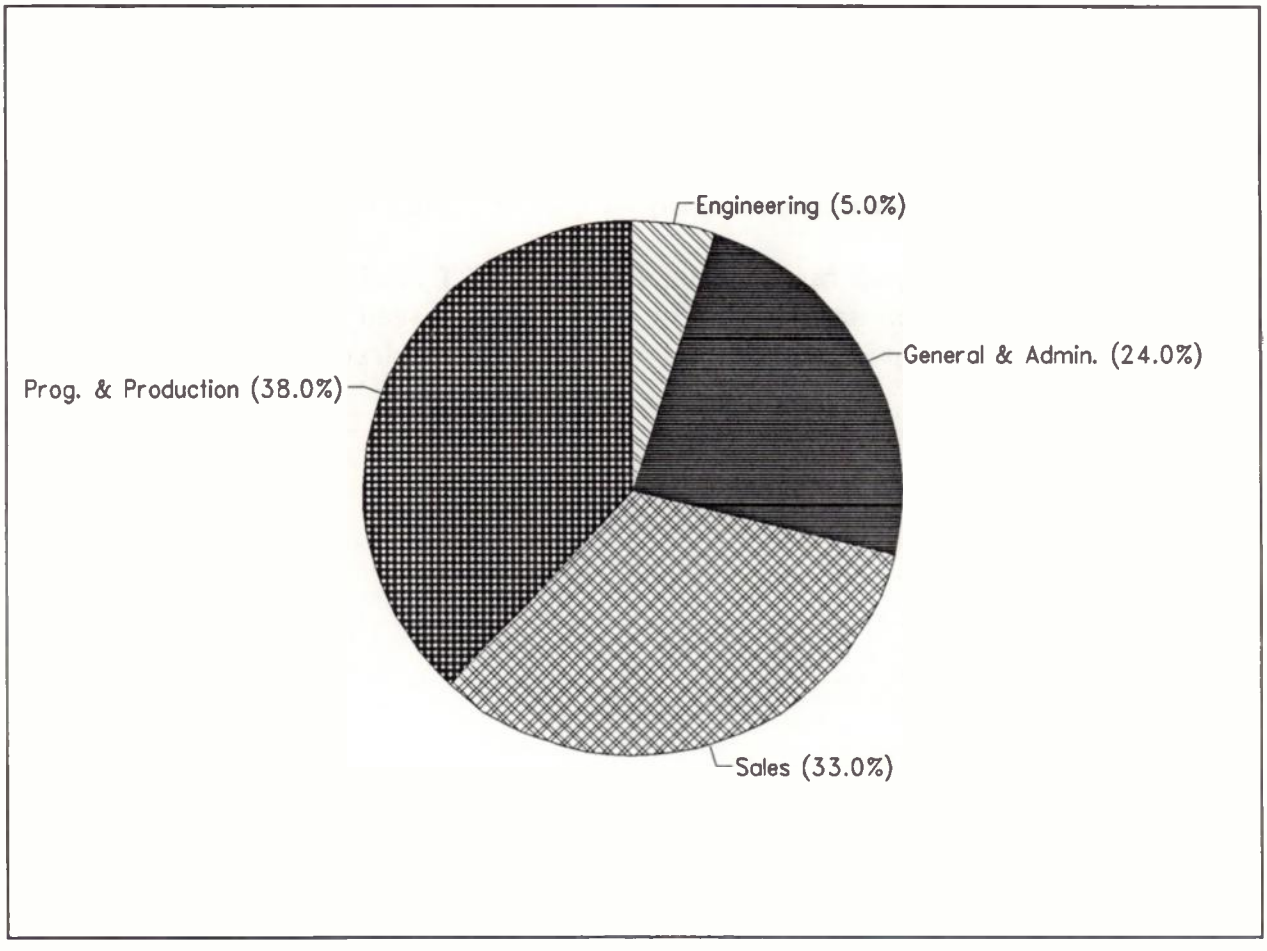
Broadcasting is essentially a service business with relatively high fixed costs compared to variable costs. The fixed costs include general overhead and administrative expenses. Salaries are "semi-variable," due to the nature of on-air talent and programming. Music and talk formats often rely on air personalities who demand high salaries. In contrast, automated formats can run on almost minimum wage labor. Variable costs are primarily advertising agency fees (normally 15% of gross billings), sales staff commissions (ranging from 5% to 15% of net local sales), and music license fees (costing about 2% of gross revenues). The relatively low level of variable costs creates a situation with a very high degree of operating leverage once the station has passed its break-even point.

Approximately 50% of a radio station's total expenses will go toward total compensation (salaries and benefits) to the staff. Table III-4 shows the staffing needs and importance of total compensation of various size market stations broken down by market population range and AM or FM classifications.[3] Figure III-1 shows where the typical station salary dollar went in 1985 -- program and production, sales, administrative, and engineering.[4]

Table III-4
Fulltime Employment Yardstick

	Fulltime Employees			Total Payroll as % of Total Expense		
Population Size	AM	FM	AM/FM	AM	FM	AM/FM
2.5 Million & Up	41	34	44	42.7%	41.0%	38.6%
1-2.5 Million	20	21	32	42.0%	38.4%	35.0%
500,000-1 Million	18	18	26	52.1%	39.4%	38.6%
250,000-500,000	11	15	22	48.5%	44.5%	44.6%
100,000-250,000	9	13	18	53.0%	46.9%	49.4%
50,000-100,000	9	10	14	55.5%	50.9%	51.9%
25,000-50,000	6	11	12	51.5%	48.8%	50.6%
Under 25,000	6	6	8	55.7%	47.1%	54.6%
	AM Daytimers			AM Daytimers		
500,000 & Up	8			41.5%		
100,000-500,000	6			47.4%		
25,000-100,000	5			61.0%		
Under 25,000	4			51.4%		

Figure III-1
Typical Station's Salary Budget - 1985



Summary

- The radio broadcast economy is characterized by a large demand for broadcast communications and a relatively fixed supply of stations. Media advertising expenditures are outpacing GNP growth and the radio industry enjoys consistent revenue and earnings growth.

- Broadcast stations can generate high pre-tax cash flows capable of supporting a large amount of debt service. That gives station owners a tremendous amount of leverage capability, especially during times of low interest rates.

- Radio industry revenues from 1974 through 1983 averaged compounded growth of almost 12%. From 1986-1988 that percentage increase was lower, but so was inflation.

- Radio revenues are very much a function of retail sales in the local market. Typically, radio revenues in a market averages 0.35% of the market's retail sales.

- Radio is a service business with a relatively high level of fixed costs -- mostly salaries -- compared to variable costs -- mostly advertising agency fees and sales commissions.

- Pre-tax profit margins ranged from 4.1% to 9.4% from 1974 through 1983 for the typical radio station nationwide. In 1988, they averaged between 6.3% and 9.8% depending upon type of station. Interest rates have a large impact on radio station profit margins.

Chapter IV:
The Audio Marketplace

"Radio's death, like Mark Twain's, has been reported prematurely -- several times."[1] So far, radio has survived the boom of television during the 1950s and the onslaught of cable television in the 1980s. Radio is remarkably resilient because it is so flexible. It serves a variety of market segments, from broad to narrow, from young to old, from rich to poor. There is something in radio for virtually any audience and for almost any advertiser.

As technology becomes more sophisticated, commercial radio will become more competitive. Historically, radio's principal competition came from newspapers. Now, radio broadcasters must compete with a myriad of non-broadcast services, including video and audio programs distributed by cable systems, video and audio cassettes and discs, and common carrier stations known as multipoint distribution systems (MDS). Other sources of competition, such as electronic publishing and direct broadcast satellite-to-home transmissions, loom on the horizon. The possible delivery by optic fiber of hundreds of video and audio services is another potential source of competition for over-the-air radio in the next century.

Radio continues to respond to the competition, however, with innovative services designed to meet the audience's fragmented needs. For example, AM radio turned to talk, all-news, foreign language and religious programming, as FM became a force in music programming. Recent technological and programming advances that will further impact the competitive atmosphere of radio include AM stereo, TV stereo, satellite networks, digital audio processing, compact disc (CD) players, digital audio tape (DAT) players, lightweight "walk-along" portable stereo radios, radio "superstations" and cable audio program services.

Cable has been the stalking horse of new technology and services. A decade ago, analysts feared that cable would severely hurt the growth of radio and television broadcasting. However, cable's appeal to subscribers has not met the level of earlier projections, while cable costs have been more than anticipated. By late 1989, the number of homes to be offered cable (homes passed) was estimated at about 80.1-million, or 89% of total U.S. television households.[2] By 1997, the number of households subscribing to cable is expected to reach 63.2 million, up 30% from the estimated 48.8 million cable subscribers in 1989.[3]

The New Audio Marketplace

A report by the NAB entitled, "The New Audio Marketplace," summarized the effects the new audio technologies and services have on radio broadcasters.[4] Among its findings:

- Audience Behavior: Radio listeners have responded to the convenience and quality of portable stereos by increasing their listening time. They have also become more discriminating in their choice of audio equipment and services, demanding more digital processed stereo in their prerecorded products, cable and television audio services and favorite radio stations.

- Radio Station Identity Problems: More choice has also meant more confusion for the listener as to the source of audio programming. For example, during rating surveys, some Arbitron diary keepers have reported the popular music video cable service, "MTV," on a radio dial position. MTV is not broadcast over the air (as are local radio stations), and therefore, cannot have a dial position. In addition, local radio stations are sometimes carried by cable services on different frequencies than their over-the-air regular frequencies.

- Technical Capabilities: The more competitive radio stations are responding to the new technology by increasing the role of CD players and digital processing in their airplay of music. There is still room for improvement. For example, NAB research indicates that in 1988, 92% of the nation's radio stations had earth station facilities capable of receiving digital audio transmissions, but only a "handful" of these stations were able to store the digital data in that format.[5]

- Cable Audio: There are three basic types of audio cable services

(1) SATELLITE DELIVERED -- including "Superstations" (such as classical music formatted WFMT-FM in Chicago and WQXR-FM in New York, and jazz station KKGO-FM in San Diego) and programming services (i.e., Star Ship Stereo, Studioline, and Lifestyle). Cable subscribers receive these services either free, as part of their basic cable service, or for an extra monthly fee.

(2) BROADCAST RADIO -- mostly selected FM radio stations from local or nearby areas. Most cable systems will reprocess the station's audio to insure quality reception by the subscribers. Naturally, radio stations which provide technically superior audio quality are apt to be selected for carriage. In 1988, according to NAB research, 35% of all radio stations were carried by the local cable system; 18% of all AM stations, 53% of all FM stations, and 38% of all AM/FM combos.[6]

(3) LOCAL ORIGINATION -- either by the cable system operator or by a "cable only" radio service which sounds very similar to broadcast radio stations. (Some even identify themselves with call letters.) According to Arbitron Rating & Research Services,

there were about 27 such "cable only" radio stations in 1985, which leased their services to cable systems. Some analysts believe that as the new technology becomes cheaper, more cable system operators will develop, program and manage their own audio services.

- Audio Service Potential Growth: Over a quarter of cable subscribers are interested in buying cable audio services. Two-thirds of the U.S. cable systems offer audio services, with typically 5-15% penetration of the subscriber base. Cable operators will most likely offer more cable audio services in the future as a means of enhancing revenues and providing added value to justify rate increases for basic services.

- Cable Carriage: More than half of all cable systems retransmit some broadcast radio signals, thus extending the station's coverage area and audience.

- Copyright Liability: At this writing, broadcast radio is not covered under the 1976 Federal Copyright Act (nor recognized by the governing body, The Copyright Royalty Tribunal (CRT)) as eligible for compensation by cable systems carrying radio broadcast stations. The NAB has tried to convince the CRT to include cable carried radio stations in the royalty payment fund, worth almost $100 million, annually.

- Cable Advertising Revenues: In 1989, the cable industry generated an estimated $1.5 billion in advertising revenues, with slightly over $300 million going to local cable systems.[7] By 1997, total cable advertising revenues are projected to increase to $4 billion according to one estimate.[8] Typically, the advertising rates on cable are similar to the rates on local radio stations, and therefore compete for the same local ad dollars. Although cable remains largely unmeasured for audience ratings, cable ratings research is being tried in the larger markets. If the trend continues, and if advertisers respond to cable measurement, cable advertising will compete with both broadcast radio and television for audience and revenues.

The NAB report calls for "action strategies" to be used by radio broadcasters. These include:

(1) MAINTAIN AND UPGRADE FACILITIES to capture the ear of the radio audience and advertiser. Long range system planning is important because the new digital processing technology requires capital improvements.

(2) NEGOTIATE CABLE CARRIAGE by promoting the radio station to the local system and emphasizing the call letters or on-air slogan. Stations should pressure the cable system to carry the station on the same frequency as the station transmits over the air. Cable operators are attracted to radio stations with high production quality and innovative programming.

(3) ENTER JOINT VENTURES WITH CABLE SYSTEMS to share profits and mutual benefits. For example, radio stations are in a great position to create custom audio services for pay cable. Stations can also work with the cable sales force to sell ad time on both media.

(4) CROSS PROMOTE with the local cable system. The possibilities include contesting, awareness campaigns on-air and on-cable encouraging cable subscribers to listen to the radio station away from home, while encouraging the radio audience to subscribe to the cable system and its premium pay services.

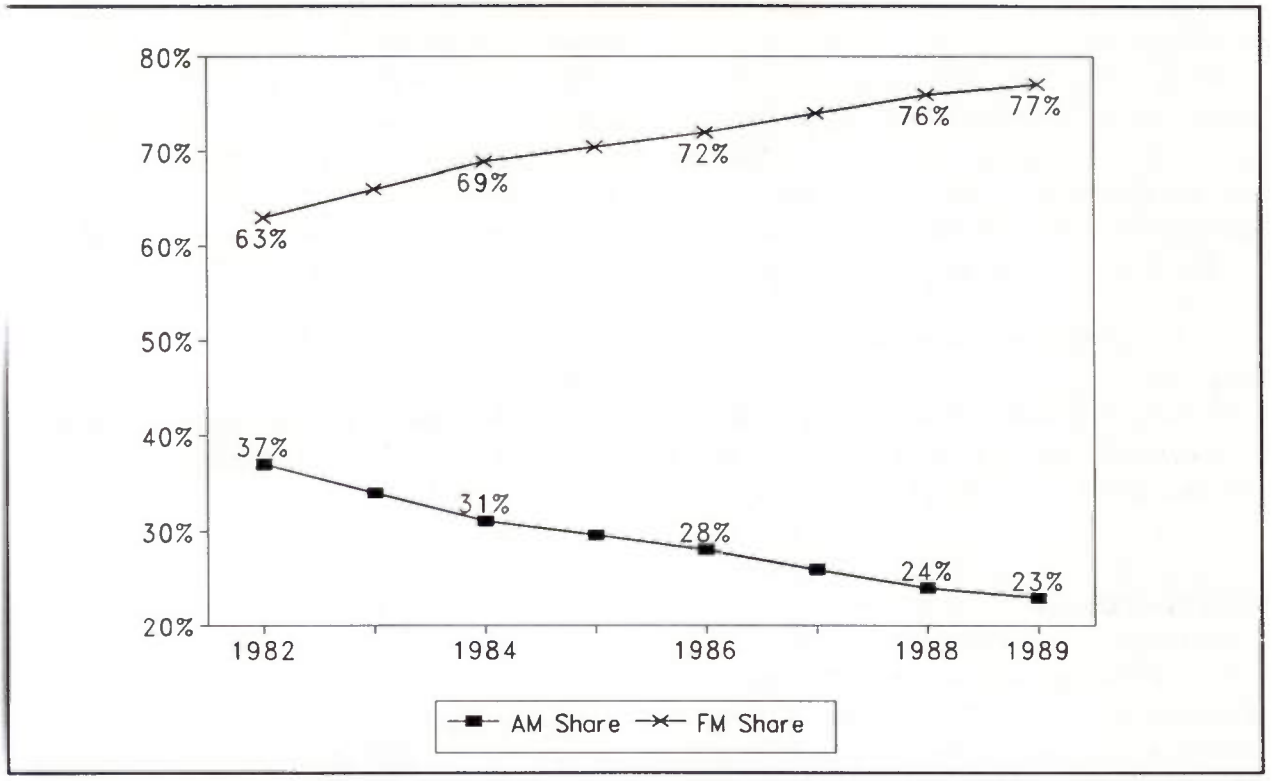
AM vs. FM Competition

Commercial broadcasting began in the 1920s with the AM radio band. Television broadcasting began in the late 1940s, and FM radio started to enjoy steady growth in the middle 1950s. During this 60 year period, the competitive environment went through continual change. AM radio was the dominant medium for most of this period. However, FM moved ahead, as listeners discovered the superior audio quality of FM and as more AM-FM combination receivers were sold. FM grew further, thanks to a 1966 FCC decree that FM stations co-owned by AM stations must be programmed separately at least half of the time (25% of the time as of 1985). In effect, the FCC regulations made FM stand on its own as a radio service and helped create innovative programming and competition. The late 1960s began a period of dramatic audience growth for FM stations as listeners opted for stereo and the inherent sound quality of the FM band. Rating services also began to notice FM growth and began to report FM station ratings separately from AM sister stations.

The turning point for FM dominance over AM audience share came in 1978, about three years ahead of industry projections. A continuation of FM growth is expected, but at a much smaller rate compared to the growth over the past ten years. In many rated markets, the top two, three or four stations are FM, and it is not uncommon for the FM station in an AM/FM combination to be "carrying the AM loser." If the decline in AM audience were to continue at the same rate, AM stations would have zero audience by the mid-1990s! Figure IV-1 shows the seven year history of total audience listening between AM and FM stations.[9]

AM revenues, in general, have been hurt by audience erosion. Late 1988 estimates by industry analyst Jim Duncan place AM share of total revenue at 23%[10], down from the 43.1% share in 1984. The only exception to the general trend was in the top 50 size markets, where 30 of the 100 leading stations were AM. AMs as part of AM/FM combination stations also seem to be doing well in generating cash flows and profits. Combinations create synergy and provide the operator with more leverage against the competition. Some analysts believe that a combination arrangement is the only safe way for an AM to operate, especially in light of an expected increase in competition from FCC planned industry expansion of 700 new FM stations to be added during the coming year. A new addition of AM stations is also planned

Figure IV-1
AM and FM Listening Levels, 1982-1989



for an expanded AM band (to 1700 kHz), once an accord is reached among participating nations.

AM Recovery

There are some signs that AM radio may recover and remain a viable medium. These signs include actions by the NAB, the FCC and the receiver manufacturing industry. While AM may never reach the position of dominance it once had, there is a possibility of its securing a sound financial footing.

Over the past few years the NAB has been spearheading the efforts to revive the AM band. Many of the FCC actions discussed below originated at the NAB. The NAB formed a separate standing committee of AM broadcasters in the early 1980s to help in that activity. This committee recently held an AM Futures Retreat to focus on strategies for NAB to use to improve the AM band. While this problem has many facets, the retreat focused on technical issues targeted to managers. The three major areas of focus were: 1) to work to improve transmission standards (e.g., mandating AM stereo); 2) reduce interference (e.g., move stations

to the expanded AM band); and 3) improve receivers (e.g., work closely with manufacturers, including their marketing departments).

Recent actions by the FCC may also improve the fortunes of AM stations. The FCC recently relaxed the duopoly rule allowing AM stations that are closer to each other to merge. Also relaxed was the one-to-a-market rule, where by new radio-television mergers are now allowed in certain markets. Under the new rules, new mergers will be allowed in the top 25 markets, so long as there are 30 distinct voices (i.e., separate owners) of radio and television stations. Finally, the previously mentioned NRSC-2 transmission standard recently adopted by the FCC will also improve AM by setting an improved, universal transmission standard.

The receiver manufacturers have been heavily involved in that new transmission standard. As previously mentioned, future improvements on other aspects of transmission are also being coordinated with the receiver manufacturers through the National Radio Standards Committee. These receiver manufacturers, like broadcasters, have an incentive to improve the quality of sound that the consumers hear.

AM Stereo

One improvement to AM sound quality is through stereo transmission. The possible further adoption of stereo transmission by AM stations may prove to be a big aid to the ability of AM to compete with FM. Most broadcast analysts are still taking a wait-and-see attitude. The FCC did not help matters when it approved AM stereo in 1982 without deciding which of the various competing technical versions available would be the official standard. The FCC's "marketplace" philosophy put AM broadcasters in a dilemma because the equipment manufacturers would not commit to marketing AM stereo receivers until a particular system dominated the AM band. Not all systems were compatible with each other, and, in 1982, there were no less than five different systems competing to be the dominant choice of AM station operators. Two systems have survived the "marketplace"--Motorola and Kahn Communications. In the summer of 1989, the NAB estimated that there were more than 640 AM stations equipped to transmit in stereo, and over 25 million receivers were able to pickup those signals.

Perhaps the biggest hindrance to the success of AM stereo is the public's perception that AM sound quality -- with or without stereo -- will never match the quality of FM. This bias is especially strong among listeners younger than 36. Older audiences, especially 50+, comprise the bulk of the AM audience[11]. On a brighter note, AM supporters believe that, if AM stereo eventually does catch on with the public, it will be more effective than FM stereo because the coverage area of medium and high powered AM stations typically exceeds that of high powered FM stations.

Summary

- The radio industry is noted for a unique ability to respond and adapt to market changes, competition and new technology.

- The "new audio marketplace" is impacting radio with technological developments such as cable, satellite networks, digital audio processing, AM stereo, CD players, DAT players, walk-along radios and radio superstations.

- Radio is responding to competition with better audio improvements like AM stereo, more promotion, joint ventures and a variety of cable audio services. Cable operators are looking to radio and radio-type audio services as an added value and revenue source.

- Cable competes with radio for local advertising dollars, although radio is a much stronger local medium.

- The NAB is advocating a series of FCC changes and industry improvements to help AM station owners compete effectively with the growing popularity and revenue success of FM stations.

- The FCC has recently adopted new rules which might help certain AM stations, such as allowing an entity to own more than one AM station per market, and allowing radio-television mergers in the largest markets.

- AM stereo is a reality in some markets and could become available in most markets over the next few years. Millions of new AM stereo receivers are in the hands of consumers.

- The NAB is spearheading improvements in AM antenna design that would greatly reduce signal interference among AM stations and increase the sound quality of AM signals.

- The NAB is also working with the receiver manufacturing industry to improve the quality of AM receivers.

Chapter V:
Radio Revenue Sources and Strategy

Commercial radio stations derive almost all of their revenue from the sale of commercial advertisements. There are two general classifications of revenue -- national and local. Within these classifications there are other unique methods of placing radio advertising such as network, regional spot, co-op and barter. Table V-1 shows the aggregate total expenditures for national and local advertising, plus annual percentage increases over a 15 year period, from 1975 through 1989.[1]

Table V-I
Radio Revenue Sources, 1975-1989
($000)

Year	Gross Revenues	Percent Change	Network Revenues	Percent Change	National Spot Revenues	Percent Change	Local Spot Revenues	Percent Change
1989	$8,485	7.5%	$428	12.0%	$1,535	9.5%	$6,524	6.8%
1988	$7,893	8.2%	$382	3.0%	$1,402	6.6%	$6,109	9.0%
1987	$7,292	3.8%	$371	-2.4%	$1,315	-1.4%	$5,605	5.5%
1986	$7,026	7.1%	$380	15.6%	$1,333	1.1%	$5,313	8.1%
1985	$6,563	11.5%	$329	5.1%	$1,319	11.4%	$4,915	11.4%
1984	$5,884	17.3%	$288	4.9%	$1,184	15.8%	$4,412	18.0%
1983	$5,015	11.7%	$254	5.1%	$1,023	12.5%	$3,739	11.1%
1982	$4,492	10.7%	$218	4.8%	$909	6.4%	$3,365	11.9%
1981	$4,057	14.4%	$196	4.8%	$854	14.5%	$3,007	13.8%
1980	$3,547	11.8%	$158	4.5%	$746	17.1%	$2,642	10.3%
1979	$3,172	9.0%	$139	4.4%	$637	7.6%	$2,396	9.3%
1978	$2,911	15.9%	$126	4.3%	$592	13.6%	$2,192	17.0%
1977	$2,513	12.9%	$118	4.7%	$521	5.4%	$1,873	14.3%
1976	$2,226	17.6%	$92	4.1%	$495	18.8%	$1,639	16.8%
1975	$1,892	7.8%	$73	3.8%	$416	7.6%	$1,403	7.3%

Advertising agencies function to create and place advertising for their clients. The relationship between broadcasters and agencies is tenuous and ambivalent -- being both partners and adversaries at the same time. Agencies make more money by having their clients spend more money on media placement, research and production. They also want to get the lowest rates from stations for their advertising clients. Agencies make money on both ends of a transaction -- a 15% commission paid by the stations on all the business the agency places, and a commission and other fees paid by their client advertisers.

Network Advertising

Networks consist of a group of interconnected stations that are fed program content by a single source. Networks normally compensate stations for clearing time for the programs in return for an agreement known as an affiliation contract. An affiliated station guarantees a certain amount of time to the network and gives the network the right to sell time in the program sent to them. Thus, the network is both a program supplier and sales organization.

Historically, network payments to affiliates are stated in terms of hours, with the base rate being the prime time rate. In television, the prime time rate is usually for 8-11 p.m. (Eastern Standard Time). In radio, prime time is known as "drive time" -- 6-10 a.m. and 3-7 p.m. Other dayparts are scaled down accordingly. The network usually pays affiliates a top percentage, up to 30% of the applicable daypart rate, for all of the spots carried with the daypart. Certain hours and spot loads may also be specified in the affiliation contract. For example, if the national rate is $100 for a spot in afternoon "drive," and the network contract calls for a minimum of 30 spots per week Monday through Friday, the station would run an average of two spots per hour, six per day, and receive $900 in compensation from the network (30 spots @ $100 each = $3,000 times 30% = $900).

According to the RAB, the growth of network revenues outpaced the growth of total radio industry revenues from 1982 through 1985, and has grown somewhat slower since then. Compounded annual growth rates for network advertising between 1982 and 1985 were 14.6%, while for total radio revenues it was 13.6%. From 1985 through 1988, radio network advertising grew 5.1% compounded annually, while total radio revenues grew 6.3%. One reason for the strong showing of network growth in the early 1980s was due to the increased development of more wired and satellite networks. There are no less than a dozen radio networks owned and operated by the major networks such as ABC, CBS, and Westwood One. In addition, many new satellite delivered program services and networks entered and exited radio broadcasting during the 1980s -- so many that it was difficult to keep track of them all.

Networks abound with a variety of programming including news, music, specials and talk formats. Generally speaking, the profusion of networks benefits radio broadcasters because of the increased programming variety from which to choose. Further, radio networks

may need affiliates in medium and large markets for which they may be willing to pay higher affiliation compensation fees.

National Spot Advertising

National advertising is usually placed on local radio stations by sales representative firms based in the large advertising centers such as New York, Chicago, Los Angeles, Atlanta, Houston and Miami. These firms are known as "reps" and buy time on a market-to-market basis, often called "spot radio." Stations hire national sales reps to sell their non-network time to large national spot advertisers. The reps charge their stations a commission -- usually 15% in radio and 5%-6% in television -- which comes right off the top of sales. The expression "net revenues" means station revenues after, or net of sales rep and national agency commissions. In radio, reps often sell their group of client stations as a convenient, one order package, often referred to as an "un-wired network" or "super-net." Reps are valuable to both stations and advertisers because they make it easier to place advertising in many markets at the same time. In addition, reps are an important source of information about national advertising trends, rate cards, pricing practices and economic conditions.

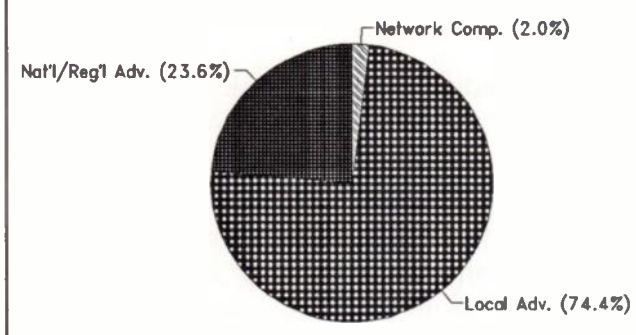
National advertisers recognize the efficiency of spot radio and its ability to focus on narrower audience segments. However, national spot billing is not dispersed on an equal basis among the 8,900 commercial radio stations. In general, stations in the top 100 markets attract a disproportionately greater percentage of national advertising dollars. The smaller the station and the smaller the market, the less, if any, national advertising will be placed. Figure V-1 shows the distribution of revenue sources for stations in different market sizes.[2]

Local Advertising

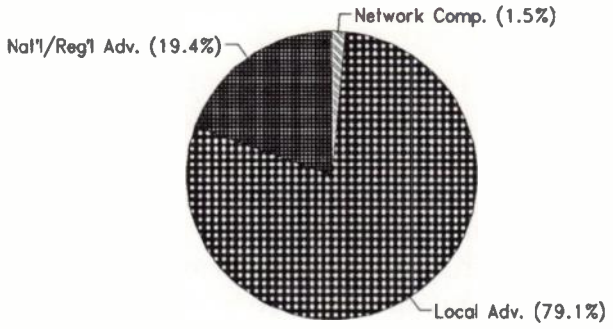
Local sales are the backbone of radio revenues and profits. Historically, about 75% or more of total radio revenues were locally placed by retailers, supermarket chains, auto dealers, theaters, department stores, etc. For stations in very small markets, virtually all revenues are derived from local sources. Local ad rate cards are generally priced about 30% below national spot rates. In the top ten markets, however, there is often only one rate card offered by the stations, with no difference in local or national rates.

In tune with the increasing emphasis on developing more local advertising dollars, several business development services exist in most large markets to track newspaper, radio and television ad activity. These services publish monitor reports on commercials aired and breakdown the information by advertiser, market, the ad placement budget, frequency, exclusive media accounts and the depth of the placement -- how many stations aired each account. The RAB is the best source for more information on available monitoring services.

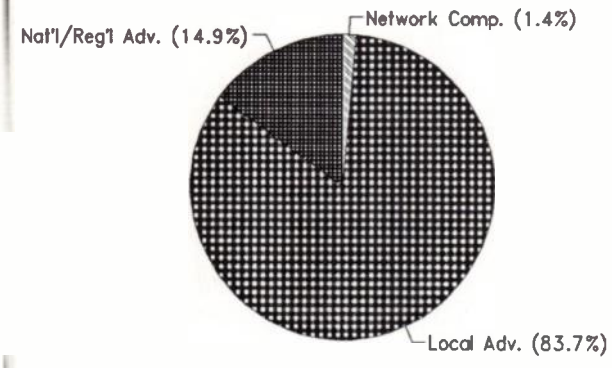
Figure V-1
Revenue Sources by Market Size - 1988



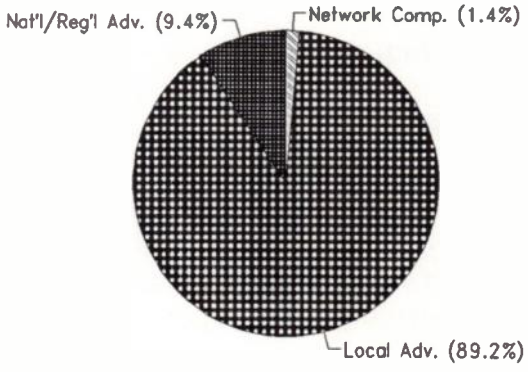
Large Market
(1-2.5 million population)



Medium Market
(250,000 - 500,000 population)



Small Market Stations
(50,000 - 100,000 population)



Very Small Market
(Less than 25,000 popualtion)

Media advertisers gauge their expenditures on the purchasing power potential of the coverage area, normally expressed in terms of disposable income of the audience. The dollars available for any station is a function of the population, disposable income and especially the retail sales of the market that the station serves. In a good radio market, the expected growth rates of the local economic statistics should compare favorably with the averages of the region and of similar size markets.

Revenue Strategy

Generating revenue takes a great deal more effort and planning than just printing a rate card and sending salespeople out on the street. Experienced managers try to maximize the revenue potential by balancing all of the variables involved, including commercial rates, commercial inventory per hour, type of commercial spots and their length. In addition, the manager tries to develop the skills of the salespeople and create new sources of revenue from the advertisers.

Determining rate card structure and commercial loads is very important for maximizing station revenue growth. Some stations use a grid card, with prices adjusted by a number of variables, such as frequency, time, daypart, spot length, etc. The standard practice in radio is to charge 80% of the one-minute rate for a 30-second commercial.

Some stations prefer to run only 60 second spots while other stations encourage a spot load ratio of 1-to-1 (30 vs. 60 second spots). For example, if the station runs 10 spots per hour, half will be 30-second spots and the other half will be 60-second spots. The preference may depend on the program format and the perception of what sounds "cluttered." Some classical music stations will not accept any spots less then 60-seconds or accept any preproduced jingles. A commercial unit could mean a 60-second spot, 30-second spot, or a 10-second mention. Low commercial loads and less clutter are factors in the ratings success of beautiful music and album rock stations. Setting a commercial load too low, however, could put a cap on a station's revenue and profit potential.

Unit rates need to be adjusted periodically to reflect revenue goals, the ratings and the competition. Stations usually raise their advertising rates in small increments as frequently as conditions permit -- about four times per year for a station that is enjoying a trend of increased audience ratings. Generally, it is NOT a good idea to adjust rates with one big price hike each year. Most advertisers realize that costs will increase and are willing to pay higher rates for a station on the rise. Drastic shifts in rate structure tend to project an unstable image, and most likely, will result in advertising base and revenue losses.

Co-op advertising is growing as a way to develop more local business. In co-op, national manufacturers and distributors absorb all or part of the local retailer's costs for media placement. The RAB publishes information on product service categories where retail radio

advertisers are completely subsidized on their radio placement.[3] Over 8,000 co-op sources provide partial compensation to the retailer for advertising expenditures. Many stations are increasing the size of their local sales staffs to develop their co-op advertising.

The RAB is heavily involved in providing training for radio station sales staffs. They hold a number of regional meetings each year to conduct that training. Investing in that training usually pays off for stations, resulting in higher advertising revenues.

Stations also need to establish guidelines for trade and barter advertising. Often, the marginal cost of an ad buy is less than the value offered in time placement. For example, the advertiser may have only $2,000 to spend on a 36-spot schedule that is worth $3,000. Trade is a standard practice to bridge the gap, especially in smaller markets. In the above example, the advertiser would provide $1,000 in "trade" -- products or services such as tires, hotel bookings, prizes for on-air contests, etc. Excessive use of trade, however negatively impacts cash flow and has a deteriorating effect on the station's rate card credibility and competitive ability. The rule of thumb is that the book value of traded advertising time should not exceed 5% of gross revenue in any fiscal year.

Revenue Projections

Accurate projection of the station's sales growth is especially important during the first year following an acquisition or a format change. Overestimating revenue will create problems for debt service and operations, thereby jeopardizing long-term station goals. Revenue estimates are usually based on market characteristics and the maximum spot load that is compatible with the station's format. For example, a fifth ranked AM Talk station that carries 18-minutes in 24 units of commercials each hour will substantially outbill the number one ranked Beautiful Music FM station that carries only eight minutes in 12 units per hour.

Managers generally have their own method for setting revenue goals. Here is an example of a numerical approach that can be used to predict a station's annual billings.

units per hour -- 12

hours per day -- 16 (6 a.m. to 10 p.m.)

days per week -- 6 (Monday -- Saturday)

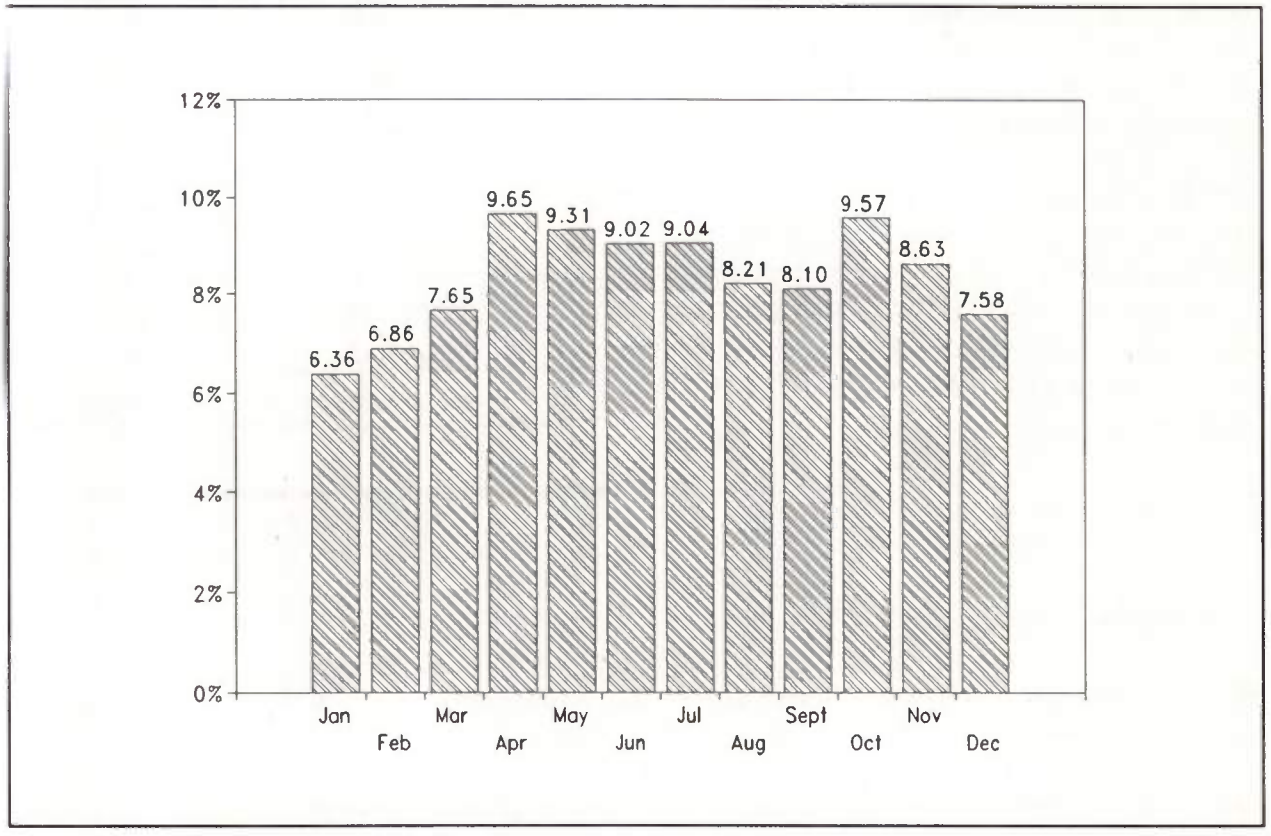
weeks per year -- 52

Using the load example above, the station has 1,152 commercials available -- or "avails" -- per week (12 units * 16 hours * 6 days). If the average rate is $35, then the maximum potential revenue will be $40,320 per week, adjusted by 60%, or $24,192 per week, which

comes to $1,257,984 per year in gross revenue. Revenue should be discounted by 15-20% to account for direct selling expenses for agency, national rep, and local sales commissions. Projected revenue may need to be discounted further to account for any special collection agreement with the prior owner.

There are many station managers who optimistically project revenue on an 18 hour day, seven days per week. That will work if you happen to be the major number one station in the market. Few stations are, however, sold out 100% of the time. Morning and afternoon drive times and Saturdays are the easiest dayparts to sell. January, February and August are traditionally low billing months. April, May and November are generally the peaks for radio advertising. Figure V-2 shows the distribution of annual revenues by month. These results are from the Los Angeles based accounting firm of Miller, Kaplan, Arase & Co.[4]

Figure V-2
Distribution of Station Revenues by Month



Of course these revenue trends may vary according to the market and station format. An easy way around the variables is to use the station's highest billing month in the last fiscal year to represent an index of 100%. The soft months can be adjusted down to 50%. A combination average could be 60%. Of course, the more volatile the station has been in revenues and ratings, the more difficult it will be to arrive at an estimate index.

Another method of estimating a station's revenue is by using the station's audience share and the market's total radio revenues. Due to the different demographics reached and spot loads offered, different formats will have different revenues even if they had the same audience share. Jim Duncan of Duncan's American Radio has examined the relationship between market revenue share and market audience share for various formats.[5] He has developed a conversion ratio which is simply the station's market revenue share divided by the station's 12+ audience share. That ratio displays how well the format generally turns audiences into revenue. Table V-2 shows the conversion ratios for various formats.

Table V-2
Format Conversion Ratios - 1988

Format	Average
AC/Soft Rock/Oldies	135.9
MOR/Full Service	134.2
News and Talk	126.3
AOR/Classic Rock	118.8
Country	115.6
Jazz/New Age	112.7
Classical	109.0
Hispanic	107.4
CHR/Top 40	102.6
Black/Urban	76.7
EZ/BTFL	74.6
Nostalgia/Big Band	57.0

Summary

- Radio stations typically derive about 75% of their revenues from local advertising, 20% from national advertising, and 5% from network advertising.
- Radio "drive times" are considered the most valuable periods for advertisers. Drive times are generally from 6 a.m. to 10 a.m. and from 3 p.m. to 7 p.m.
- National and network advertising is an important revenue source in large and medium sized radio markets but is a minor source for smaller market radio stations. National ad rates are typically about 30% more expensive than a station's local rate.

- Radio networks have grown over the past few years in programming variety and revenues. Satellite delivery is the technological standard for most radio networks.

- Advertising agencies and national "rep" firms generally receive a 15% commission from the stations that carry the advertising. "Net" revenue refers to station revenue after these commission expenses have been deducted.

- Successful stations set consistent policies for advertising rates and commercial loads. Some stations run only 60-second spots while others run a balance of many commercial units of varying length. Generally, a 30-second unit costs a radio advertiser 80% of the rate for a 60-second unit.

- Co-op advertising is a growing revenue source for all radio stations. Co-op is a way for national advertisers to saturate an area while sharing the advertising costs with local distributors of the national products and services.

- The Radio Advertising Bureau assists stations in numerous ways, such as developing co-op advertising sources and training sales personnel.

- Revenue projections are based on a combination of factors including cyclical economic changes in the market, the station's average advertising rate, and the station's average commercial loads. One suggested formula is: revenue projection = 60% x average unit rate x 59,904 units per year. Another rule-of-thumb is to estimate annual revenue as a percentage of radio market revenue based on the station's audience share and its format.

Chapter VI:
Positioning with Ratings, Programming and Promotion

Radio stations are "positioned" to appeal to listeners and advertisers in their service area much in the same way that other image-conscious products and services are marketed. There are as many positioning strategies as there are radio stations, with each tailored to the unique characteristics of the station's programming, audience, personnel, resources and advertising base. As commercial radio becomes more and more competitive, the most successful stations are taking a marketing approach emphasizing audience research, programming and promotion.

The general positioning strategy is to segment the market into a targeted demographic audience and advertising base, and then to differentiate the radio station from the competition. Soft drinks and contemporary rock music radio stations are positioned through differentiation. What makes each stand apart from its competition is their advertising and promotion. Convertible sports cars and jazz formatted radio stations are examples of segmentation because each appeals to a particular lifestyle -- in this example, a common segment of the market that is measurable, sizable and reachable. Radio's future seems to be headed toward more segmentation and narrowcasting. Successful stations carve out a sizable market segment, appeal to it with special programming, and build the local sales base to match the target audience.

Ratings and Research Services

Audience segments are commonly identified and measured by age and sex demographics: Adults 18-49, Men 18-24, Teenagers, etc. More specific demographic characteristics are used to gather information on product usage and usually include data on income, education, occupation and social class. Thus, a product might be positioned to appeal to working women with families, or a radio station might be positioned to appeal to younger, rock music-conscious fans, aged 12-24, with particular emphasis on male listeners aged 18-24. All of the broadcast rating services break down their audience rating information into standard age and sex demographics. Most also offer information on product usage habits, psychographics and the lifestyles of the listening audience.

The two most widely used radio audience research services are Arbitron and Birch. The major difference between the two is the methodology they use to gather and report rating information. Arbitron measures audiences through diaries sent to a sampling of listeners in a market. Subjects keep a log of the stations they listen to, and for how long, over a week-long period. Birch gathers information through telephone recall interviews with a representative

market sample. Arbitron has been the leader in the research field but the newer Birch service is making inroads. The key to being a recognized research service is to gain acceptance by the advertising agencies. In late 1989, about 1,800 stations and more than 3,500 agencies and advertisers nationwide subscribed to Arbitron, while Birch had about 588 stations and over 500 agencies and advertisers. The cost to stations for using each rating service varies, depending on market size and signal coverage, and the services they buy. Stations pay additional charges for monthly rating reports.

Ratings measure a station's audience in its primary coverage area, known as the "Area of Dominant Influence" (ADI). The ADI radius is approximately 75 miles. Ratings also measure a smaller radius of the audience in the Metro, or the metropolitan area where the core of the market population is concentrated. This is the area of greatest concern to most national and local radio advertisers. Metro areas, sometimes called the Metropolitan Statistical Area (MSA), usually conform to the U.S. Census Standard Metropolitan Statistical Area (SMSA).

Ratings are the key to determining pricing on a radio station's advertising rate card. Advertisers and agencies compare the relative efficiency of advertising media on the basis of cost-per-thousand (CPM), or the cost to an advertiser of reaching 1,000 people. CPM's are figured by multiplying the average quarter hour audience of a time period by the number of commercials the advertiser is running in that period. The resulting number is called "gross impressions" or GI. The total cost of the ad schedule is divided by the GI in thousands.

In radio, ratings are expressed in terms of individual people and are a function of how many people listen and how long they listen. The two most commonly used listening measures are "cumulative," or "cume," and "average quarter hour." Cumes measure how many different people a station reaches within a given daypart (such as 6 a.m. to 10 a.m.). The cume figure is net; there is no duplication because listeners are counted only once. Average quarter hour estimates the mean number of people who tune into a station for at least five minutes during any quarter hour segment in an hour block. A station's rating "share" is determined by dividing the average quarter hour listeners of that station by the total average quarter listeners for all radio stations in the market. Share simply represents the station's percentage of the total population in the rated area that is listening to all radio stations in a given time period.

Table VI-1 illustrates the difference between cume, average quarter hour and share. In this example, there were 6,300 listeners, on average, listening to this station at any time between 8:00-9:00 a.m. These listeners constituted 6.3% of the 12+ population in the metro area. During the entire hour, 13,900 different people tuned into the station for at least 5 minutes. For the entire daypart, 6:00-10:00 a.m., the station had an average audience of 4.8% of the 12+ population, with 22,500 different people tuning into the station for at least 5 minutes. This daypart cume is not the sum of the hourly cumes since a number of people listened for more than one hour. By simply counting the hourly cumes, you would overstate

the daypart cume. Only 60,000 of the area's population listened to radio during that daypart and this station garnered 8.0% of all listeners during that daypart.

Table VI-1
Average Quarter Hour and Cume

Radio Station Daypart 6-10 a.m.	Avg. listeners each hour	Avg. 1/4 hr. Rating	Cume (# of different listeners sampling the station each hour)
6-am to 7-am	3,000	3.0	9,000 different people
7-am to 8-am	4,200	4.2	10,300 different people
8-am to 9-am	6,300	6.3	13,900 different people
9-am to 10-am	5,800	5.8	11,700 different people
Daypart Average & Cume	4,825	4.8	22,500 different people
Avg. 1/4 hr. Share = 8.0	4,825/60,000		

NOTE: Rating is a % of Market Population of 100,000
Share is a % of total listeners to all radio in market. Average 1/4 hour listeners to all stations during daypart = 60,000.
Cume is not expressed as a share because listeners may tune out during daypart and tune into another station.

Using the definitions above, and the average quarter hour data presented in Table VI-1, assume that an advertiser wants to run eight spots in morning drive at $50 per spot, for a total of $400. The efficiency of the radio spot schedule is measured as follows:

Gross Impressions = Avg 1/4 hr times # of spots

38,600 GI = 4,825 * 8

Cost per Thousand = cost divided by GIs times 1,000

$ 10.40 = $400/38,600 * 1000

The advertiser can compare the $10.40 CPM of reaching the morning audience on the example station with the CPM of reaching another station's audience. Of course, cost is not

the only consideration. The advertiser wants to reach their targeted customer base and will select the stations by the demographics they will reach in morning drive.

Prospective station owners need to understand the ratings history of all radio stations in the market. Often, a station which has achieved an excellent reputation over the years will benefit from its image even if current rating reports begin to decline. The marketing strategy will be to sell the "carryover effect" of past performance while working to improve the ratings. Unfortunately, the reverse can also haunt a station trying to sell spots at higher rates based on a new and improved ratings report. Advertisers, especially local clients, often make ad buys based on past performance, and will take a wait-and-see attitude on these new and improved ratings.

Other types of market research are becoming more important to radio stations as a tool for positioning the station with the audience and the advertisers. A custom designed market research approach can be used to gather information about everything from the popularity of on-air talent, the image of the call letters, the colors used in the station graphics, etc. The market research tools include small focus groups of 6-12 people, large audience reaction groups in special image-testing sessions in theaters or large rooms, large sample in-depth marketing surveys, and music "call outs" to test the appeal of current and past hits. Numerous market research consultants are listed in the *Broadcasting-Cable Yearbook*. Some broadcasters conduct their own research. Inexperienced broadcasters, who are entering ownership for the first time, should hire a consultant to conduct market research to find out how their station is perceived.

Program Formats

Programming is the single most ephemeral factor for a successful radio station. Conceptually and in execution, it is a blending of art and science. Major markets contain dozens of radio stations, each competing for audience and advertising revenues. In the postwar period, the number of stations rapidly expanded and mass production of recorded music accelerated. Station owners discovered that they could not continue to be "all things to all people" and continue to make a profit.

Specialization and narrowcasting began in the 1950s and continues today. In each of the top 50 markets, there is at least one Contemporary Hit Music station, one Country Music station, one Adult Contemporary or Easy Listening station, and one News/Talk station. These four stations will, in most instances, divide up the largest share of the audience, revenues and profits. In larger markets, the variety of formats will include Beautiful Music, Nostalgia and Big Band, Oldies, Album Rock, Urban or Black, Spanish News/Talk and Spanish Music. Specialty formats also include Classical, Jazz and foreign language. Other more unique and innovative formats attempted during the past few years include, All Elvis Music, All Beatles

Music, All Comedy, All Children, All Contests, All Weather, All Sports, All Trendy Lifestyle Features and one that tried All Commercials and Infomercials.

As of December 1989, Country Music was the most widely programmed format on commercial radio stations. Table VI-2 shows the breakdown of radio formats[1]:

Table VI-2
Most Popular Radio Formats
AM and FM Commercial Stations- 1989

AM Format	% of AM Stations	FM Format	% of FM Stations
1. Country	28.3%	1. Adult Contemporary	29.5%
2. Adult Contemporary	22.7%	2. Country	25.8%
3. Oldies/Gold	10.8%	3. CHR	20.3%
4. News/Talk	10.4%	4. AOR	6.6%
5. Big Band/MOR	7.9%	5. Oldies/Gold	4.9%
6. Religious	6.3%	6. Easy Listening	4.0%
7. Easy Listening	3.2%	7. Urban	2.0%
8. CHR	2.6%	8. Classic Rock	1.4%
9. Other	7.8%	9. Other	5.5%

As a general rule, contemporary music, beautiful music, classical and jazz are found more on the FM dial, while News, Talk, Spanish, Black and specialty formats are found on the AM dial. Beautiful Music is the least expensive to program, while News/Talk and live personality Contemporary Hit Radio are among the most expensive to produce. Automation, which lends itself to Easy Listening and Beautiful Music formats, is cheaper to run than live personality formats. Automation equipment is a great depreciable write off while air personalities may be costly, and at times, aggravating.

In larger markets, it is common to employ outside program consultants, market research and in-house program staffs to achieve the right format to edge out the competition. In smaller markets, the sales department often dictates what will be programmed because that is what they believe they can sell to the advertisers. This is usually a short term strategy that will never win over the lion's share of the market audience.

Rank among stations in the target demographic is the most important aspect for sales purposes. Usually, it is only in smaller markets that advertising is bought based on 12-plus ratings. For example, in a 15 station market, a contemporary music station can make a very good living if the station is rated number three overall (quarter hour share, 12-plus) behind a beautiful music FM and an established 50 kw AM station, as long as it is rated number one in the 18-34 demographics. However, if the station fails to lead in any one demographic cell (i.e., the station is rated only number three in 18-34 adults and the two stations ahead of it are an album rocker and another contemporary music station), management had better plan on making some drastic changes quickly.

Most owners are advised not to get hooked on prestige in selecting a format. FM stations are not necessarily easier to program than AM stations. Some of the least successful formats are Classical and Beautiful Music, while some of the most profitable are Religious, Spanish, Black and Album Rock.

Promotion

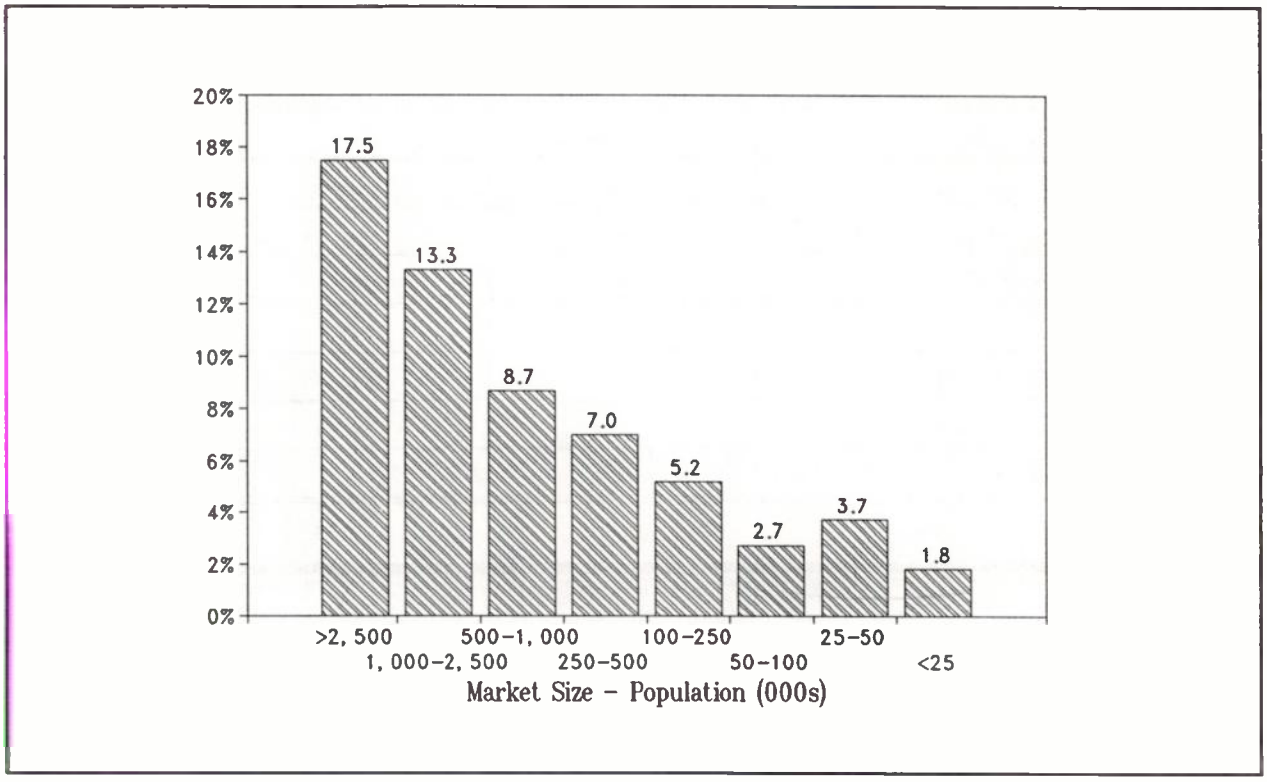
Broadcasting offers unique promotional opportunities because it is itself a medium of advertising. On-air station promotion is free. That is the very least any station can do -- promote itself on it's own airwaves. Promotion need not be expensively produced, it can be as simple and consistent as using an on-air slogan that reflects the image and programming of the product. "WBF....simply beautiful on FM 98" says it all for a beautiful music station, and so does "R-100...Rockin' Rochester." Well designed marketing research studies should be used to determine if a station or format is improperly positioned and how the situation could be corrected.

A sufficient promotion budget will be needed to promote a change in format or call letters. Audiences tend to seek out new television programs, but most listeners, except for 12-24 year olds, do not seek out new radio stations. Adults tend to be satisfied with habit listening and do not scan the dial very often. It takes substantial promotional money to get people to change listening habits. Younger appeal formats have the best chance for making the most effective use of promotion. Often one rating book is enough to launch a ratings winner for stations programmed as Hot Hits, CHR, Album Rock, Urban, and Country. On the other hand, News/Talk and Beautiful Music stations can take three or more years to show reasonable audience growth. Barter is a standard practice to help defray the cost of promotional ad placement on other media such as TV, outdoor billboards and print.

Figure VI-1 shows the percentages of total expenses accounted for by an average radio station's advertising and promotion budgets by market size, during 1988.[2] The following table, Table VI-3, shows results from a survey, conducted by the Broadcast Promotion and Marketing Executives (BPME) and Arbor Research of Philadelphia, on promotion activity by radio and

television stations.[3] These particular results report the percentage of radio stations using various promotional tools to attract new audiences and/or maintain their current audiences.

Figure VI-1
Advertising and Promotion Budgets by Market Size
% of Total Expenses - 1988



Generally speaking, it is not a good idea to begin heavily promoting a station until the new format is in place and the bugs have been worked out. TV spots, outdoor billboards, newspaper ads and on-air promotion of the station are designed to get listeners to try the station and sample the programming and image. If they do not like it they will not stay tuned. More importantly, it may be impossible to get them back. The best advice is to change the call letters and format at the same time. Gradual change tends to confuse listeners and advertisers. One possible exception is older audience formats, such as beautiful music, because older listeners will stay tuned for gradual and modest positioning changes. Once the new programming is in place, promote it like crazy. Most format changes have the goal of station ratings and revenue turnaround -- the quicker the better.

Table VI-3
Radio Promotion Tools and Priorities
(% of Stations Responding)

	New Audience	Audience Maintenance	Both
Concerts/Large Events	9%	17%	65%
Station Image Campaigns	33%	4%	61%
News Image Campaigns	4%	9%	13%
Topical News/Sports Promo	11%	6%	28%
Community Involvement	11%	13%	65%
Personal Appearances	15%	13%	65%
On-Air Contests	17%	24%	54%
Point-of-Purchase Promotions	37%	4%	37%
Promotions of DJs/VJs	17%	11%	59%

Summary

- Radio stations are "positioned" to appeal to listeners and advertisers by projecting a station image with programming, personalities and promotion.
- Radio stations segment the market into a targeted audience demographic and lifestyle and a targeted advertising base compatible with the audience segment. Radio tends to "narrowcast" to a particular segment which is large enough to support the station with ratings and revenues.
- Radio ratings firms measure how each station is efficiently reaching specific audience segments. The two leading rating firms are Arbitron and Birch. Arbitron uses a diary method of research while Birch uses a phone survey method.

- Ratings provide the data that advertisers use to measure and compare the cost effectiveness of their messages on competing radio stations. The most basic comparison is called CPM, or "cost per thousand." The ratings measure the audience in terms of average number of listeners and the cumulative number of listeners.

- Many radio stations conduct their own audience research to determine if the station is positioning itself within the market for the best ratings and revenue results. The research usually involves a variety of techniques and approaches including surveys, phone calls and focus groups.

- The level of resources budgeted for station promotion often determines if a station can effectively compete in a large market.

Chapter VII:
Acquisition Strategy and Acquisition Search

The process of acquiring a broadcast station is more than just a numbers exercise. Philosophical, sociological and other intangible aspects relating to buyers and sellers are mysterious elements on which transactions are built. The questions of "what to buy" and "how to buy" can only be dealt with after a prospective owner can answer the question "why to buy?"

The most basic reason for buying a radio station is to achieve a good return on the investment. From a financial standpoint, the business involves generating the maximum operating profit possible from day-to-day operations, and then applying the cash generated to service any debt incurred, or for reinvestment, expansion and dividends. Broadcasting is a service business, and as such, is a cash generator. Very little cash, relative to the initial investment, is required for additional tangible assets.

The second part of the financial objective is to translate the income stream into increased equity by enhancing the value of the station in the marketplace. The fair market value of a radio station is therefore related to earnings that can reasonably be expected to accrue from audience ratings, the advertising base and rates and the future resale of the property.

Types of Buyers

Generally, there are two kinds of buyers: those who must be in a certain market and those who focus on product. The former are willing to pay extra to operate in the market of their choice and their reasons for buying a market are as many and varied as there are buyers. The latter, often the industry's shrewdest negotiators, look closely at potential revenue, profits and specific terms of a transaction. They are more responsive to measurements such as cash flow than they are to any particular skyline. The quality of the facility and its coverage are paramount to these buyers.

The most common strategy for first time buyers is to acquire a single broadcast facility. If return on investment is the sole goal, absentee ownership is also a standard practice. Professional managers are hired to run the day-to-day operations. This approach is useful for an investor whose major objective is to buy, build, and in the short-term future, sell for capital gains. In radio, a good facility in a growth market seems to appreciate in value, even with flat earnings. A significant capital gain in three years is not uncommon provided that the market, signal and management are without flaws.

Successful first time owners often develop their investment goals for expansion and acquisition of additional broadcast facilities. Group ownership becomes the strategy for increasing operating profit and capital gains, and spreading the risk among several facilities. First time buyers and small group owners are also attracted to broadcasting as an investment method to enhance their other business interests in the localities in which they operate.

Self employment and active management involvement are often other goals for acquiring a broadcast station. Many small and medium market radio stations are actively run by their owners who are involved in every operational detail. Family members are often on the payroll. The best advice for inexperienced first time owners is to hire a professional manager. Radio is management-intensive and only a technically superior signal is more important than a competent general manager. Large corporate investors in broadcasting have learned to understand the value of experienced broadcast management. Those companies that are not actively involved in operations seek to improve their return on investment by buying management and program talent.

Other incentives for active participation are the benefits that an owner/operator can enjoy from trade and barter. Some small market radio operators are notorious for this, with much of the owner or manager's personal property supplied on barter deals. The benefits are often enjoyed by the entire family with members enjoying barter-generated-credit at local retailers and driving station-owned sports cars.

A third philosophical drive is one relating to personal ego. In many communities the local station owner enjoys greater stature, and greater exposure, than many local officials. Owning the local station can be a great springboard for entering politics. If the station has a network affiliation and the owner becomes actively involved in the radio industry, the owner will have opportunities to meet celebrities and influential people.

Tax incentives are yet another reason for station investment. An underdeveloped radio station can generate tax losses for its owners while maintaining a break-even level of cash flow. This occurs when depreciation charges can be increased by recapitalizing the assets. Tax deductions can also flow through to the IRS returns of individuals if the station is owned by a sole proprietor, partnership or a Subchapter S structured corporation. However, tax shelter incentives for ownership creates a philosophical fallacy. As has been stated, the operating objective in acquiring a broadcast station is to build the income stream as fast as possible and eliminate, in as short a time period as possible, any losses generated from the operation. In addition, the 1986 Tax Reform Act limits the "tax game" that can be played. For a private investor, it is open to debate whether broadcast ownership, as a general rule, provides an appropriate tax shelter vehicle.

Private investors have provided the largest pool of investment capital in the broadcast industry, particularly in radio stations. Television is expensive to own and operate, and tends

to attract corporate forms of ownership. Most corporate television station ownership, however, arose from early efforts of individuals who then expanded their holdings.

The majority of corporate investors in broadcasting are small, closely-held groups. Historically, large corporate investors in radio broadcasting had been limited to just a handful of public companies, such as Capital Cities, Metromedia, Storer and Great American. These corporations understood the nature of broadcast operations and finance. Still, widely-traded, public corporations own only a small percentage of the total number of broadcast stations. As recently as 35 years ago, there was only one significant publicly owned company which operated broadcast stations.[1]

Charter Corporation and General Electric are two examples of such large corporations who invested in radio and TV stations yet later sold their properties. Analysts suggest that the unique nature of broadcasting did not mesh with the more capital- and labor-intensive aspects of these companies' other operations. Interestingly, General Electric is now back in the television industry since it purchased RCA, parent company of NBC.

In broadcasting, the most significant assets are the station license and operating personnel -- both very valuable, but rather intangible compared to the assets of other industries. Additional problems arise due to a lack of compatibility with personnel, management philosophy and compensation standards. On the other hand, public corporations have considered buying radio stations simply as a stalling hedge against takeover from a foreign conglomerate, since the FCC has ownership interest limitations on non-U.S. citizens.

Underlying all of the philosophical drives is the ultimate financial objective of the investor, which can differ according to the corporate structure. Private investors want to generate cash and shelter taxes by maximizing non-cash charges, such as depreciation and amortization. Corporations, especially public companies, are often concerned with reported net earnings and minimizing non-cash charges against operating income so as to increase reported net income. The investing public often measures the returns it can get in a broadcasting investment against other forms of available "net earnings" investments. It should be noted, however, that this rather simplistic investment perspective is changing due to both public and private investors becoming more sophisticated in evaluating the financial nature of broadcasting.

The distinction between private and public corporate investors impacts the prices paid for acquisitions of broadcast properties. For example, a private buyer, less interested with reported net income and more concerned with cash flow, will be able to justify paying a higher price for a radio station than would a publicly owned corporation whose stockholders may not be aware of the nuances of broadcast accounting.

Lead Time and Resources Needed

Finding the right broadcast property in which to invest is a time consuming process. A first time buyer should plan on at least eighteen months for screening the available deals, researching the markets and facilities, making sure that the financing package and business plan is in order and finally, negotiating the transaction with the seller. Some of that time will be spent seeking and waiting for FCC approval, although the FCC's turnaround time for approval has improved in recent years. It is not uncommon for a transaction to take six months or more from the time a purchase agreement is first drawn up until the time the station finally changes hands. Approval to build a new station is likely to take much longer, especially if the FCC requires a comparative hearing to choose among competing applicants.

A prospective purchaser, especially one without broadcast management or ownership experience, should consider hiring a consultant or advisor familiar with the complex nature of the broadcasting business. Aside from the technical, sales, programming and general administrative needs of a new station, a consultant can offer valuable advice on finance, market evaluation and facility appraisal. Unfortunately, no established procedure exists for securing such advice. Given the confidential nature of the counsel, this service always rests on personal trust.

Beginning the acquisition search is just a developmental stage and may require "seed" capital to conduct feasibility studies and meet daily expenses. The entrepreneur's expenditure of personal resources and capital will be viewed by consultants, lending sources, brokers and sellers as a genuine commitment to the goal of acquisition rather than just "window shopping." This type of evidence of commitment increases the likelihood that a buyer will receive cooperation and assistance from all concerned.

Broadcast Brokers/Investment Bankers

Sources of information about properties available for sale include broadcast brokers, broadcast attorneys and broadcast investment bankers. Brokers prefer to handle properties on an exclusive basis, and therefore, it is advisable to contact as many appropriate brokers as possible. Most will ask the would-be buyer for a financial reference to insure that they are not wasting their time. Like real estate agents, brokers work on a commission basis paid by the sellers. The broker's fee on small stations' sales could be 5% of the total sales price. On larger stations' sales, the fee is typically 5% of the first $5 million, 4% on the next $1 million, 3% on the next $1 million, etc. On sales involving many millions of dollars, brokerage fees are generally negotiated between parties. It is not uncommon for a potential buyer to engage the services of a broker to help locate and assist in the acquisition of a broadcast station. Again, the fee structure depends upon the deal and is negotiable.

Some of the questions the buyer should be able to answer for the broker include:

1) What market size and/or geographic location are desired?;
2) What type of facility (fulltime AM or daytimer, FM class, combo, etc.)?;
3) Are you looking for stations with existing cash flow or one with potential cash flow?;
4) What is the dollar value range of the deal?
5) Whether the transaction will be structured as a cash deal or one with financing?;
6) And how much of a down payment the buyer is willing to make?

If the broker is convinced that the buyer is serious about buying and has the resources and financing available, the broker should begin to make financial data on potential properties available. At the very least, that information should include revenues, expenses, cash flow and type of facility. Hopefully, the broker will also provide insight into the type of market, the competition and station rating trends. The buyer should always plan, however, to get independent counsel on such matters. Brokers are good sales people, and as such, tend to paint a rosy hue on a possibly otherwise drab picture.

Once the buyer has all the necessary information and believes that the station is affordable, is in a large enough market to make an operating profit and is not carrying too large a burden of debt service, the next step is to inspect the facility. The broker will arrange for the visit on a confidential basis to protect the seller's operations and avoid upsetting the station personnel and advertisers. For obvious reasons, most owners do not openly advertise that they are looking to sell.

If the buyer is ready to make an offer after the station visit, the broker will help negotiate the sales price and terms of the purchase. Yet, the buyer must remember that the broker represents the seller and has a duty to try and obtain the highest price possible. At this stage, the buyer will generally bring attorneys, accountants, investors and lenders into the deal to advise on financial structuring, terms and tax considerations. The broker's role at this crucial point will be to "keep a positive attitude on what a good deal it is for everyone and just be available to plug the dike if the deal begins to go sour. [He's] part psychologist, cheerleader and magician trying to anticipate all the things that can and will go wrong."[2]

The broker's interest is to complete a successful sale as soon as possible. Since the sale is not complete until financing is arranged, many brokers will help the prospective buyer arrange a financing package. Often they can assist a buyer in developing a financial proposal. They can also provide leads to lenders they know are interested in financing broadcast acquisitions. In some cases, they can arrange the necessary financing themselves and will charge the buyer for that service. In situations where the sale is between the buyer and the seller directly, with no broker involved, a buyer may still hire a broker or an investment banker

to help arrange financing. Regardless of any broker services for financial arrangements, the buyer should always investigate other potential lenders to make sure they get the best available terms.

Additional Leads

Another tactic often used by buyers is to make a direct, unsolicited offer to a station owner operating in a desired market. In most of these cases, information that the owner is seeking a buyer comes from broadcasters in that market. Broadcasters love to talk and tell you what properties they think are for sale. The main source of leads for brokers is word of mouth. Any unsolicited letter, sent to the seller should at least provide financial references as evidence of the prospective buyer's ability to follow through on an offer.

Communications lawyers are often likely to know of stations for sale by their clients. There is almost an immediate potential conflict of interest, however, if the attorney attempts to represent both the buyer and seller. In many cases, lawyers will refer clients to another attorney.

Your attorney can assist in numerous ways. For example, when anonymity is desired, the attorney can be used to shield the identity of a buyer from the seller until agreement on the basic form of a sale is finalized. Or, the law firm can help a buyer contact a reputable broker. Some lawyers will advise only on the purchase agreement and the FCC aspects of the transaction. Finally, others will provide corporate and tax counsel or assist a local attorney in these matters.

Stations available for sale are not limited to listings with brokers and attorneys. Owners trying to sell stations without a broker often place classified ads in *Broadcasting*, a weekly publication, and other trade journals. Prospective owners also place ads in *Broadcasting* to solicit responses from owners interested in selling. Reading *Broadcasting* each week will also help to provide an idea of the current market values of stations. The "Changing Hands" and "For the Record" sections of *Broadcasting* give the basic details of transactions awaiting FCC approval, including the purchase price and special terms. Each year, in late January, *Broadcasting* publishes a special report summarizing all the transactions during the previous year.

Buyers (and sellers) should select brokers, consultants and attorneys specializing in the type of facilities to be involved in the transaction. The following sources provide comprehensive lists of professionals experienced in broadcasting and FCC procedures:

Broadcast Financial Record
Paul Kagan Associates
126 Clock Tower Place
Carmel, CA 93723

Broadcasting-Cable Yearbook
Broadcasting Publications, Inc.
1735 DeSales Street, N.W
Washington, D.C. 20036

Television Factbook
Television Digest, Inc.
1836 Jefferson Place, N.W
Washington, D.C. 20036

Broadcast Financial/Legal Service Guide
by Tom Buono,
Broadcast Investment Analysts/Frazier, Gross & Kadlec Inc
Box 1730
Washington, D.C. 20041

Summary

- Most of the people who buy radio stations are motivated by the ability of stations to generate cash, appreciate in value and build equity for the owners.
- Generally, there are two types of buyers: those who invest in a certain station and those who invest in a market or region.
- Radio station ownership may also offer tax, barter and synergistic opportunities. Other motivations for ownership include ego, self employment and public image.
- Private investors, rather than publicly owned corporations, comprise the major share of radio station owners. Public investors generally seek only financial gain from owning a radio station.
- Before a buyer can decide what radio station to buy and how much to pay, the buyer first must decide "why" to buy.

- Station acquisition is a time consuming process that generally involves seed capital and expert advice. It is not unusual for a first time buyer to take a year or two to find the right station, negotiate the purchase and secure FCC approval.

- Broadcast brokers will help buyers screen the literally hundreds of stations that are for sale at any given moment. Brokers, broadcast attorneys and investment bankers may also help the buyer line up financing and additional consultants.

- The station seller pays the broker a commission. The buyer may also be billed for special services by a broker or a financial consultant involved in the transaction.

- Acquisition leads may also come from direct contact with station owners and from regularly reviewing the listings found in broadcast magazines and publications.

Chapter VIII:
Market Evaluation and Information Sources

Broadcast stations, by FCC definition and advertising considerations, exist to serve specific communities and markets. The first step in appraising a potential acquisition is to understand all of the relevant factors about the market in which it operates. A buyer must be able to determine the extent of sales and profit potential of the station. The basic investment characteristics of a station can be broken down into three general considerations: market quality, competition and aberrations.

To evaluate a particular market, the prospective buyer needs to compile his own market information resources. Data included would involve local economic and demographic characteristics, as well as information about the local radio marketplace. There are a number of useful, publicly available sources for this essential information which are described later in this chapter.

Quality of Market

Obviously, the size of the market is important and will relate to: 1) the number of people being served; 2) the consumer disposable income generated by that population (per capita disposable income); and 3) the level of retail sales. These are the principal measures commonly used in appraising the size of the market. There are several studies which attempt to quantify the relationship of consumer disposable income and level of retail sales to total advertising revenue, as well as to potential broadcasting revenues, in any market. There do not appear to be any hard rules of thumb that can be derived from such analyses. However, a market in which consumer disposable income and level of retail sales are advancing rapidly will probably reflect a strong growth pattern in its media spending, and particularly in its broadcast advertising. Additional market characteristics affecting station value include the number of households, level of bank deposits and total advertising revenue shared by all the media in the market.

Maximization of revenues is a management objective common to all stations. Past revenues provide a combined measure of management effectiveness, market size, competition and relative technical coverage. Assuming stabilized competition, future earnings and revenue improvements for a particular station are functions of market growth and management. Yet, in situations in which a station's margins are greater than the average station in the market, the quality of the market may not be the determining factor. It could be that the owner is not sufficiently reinvesting capital to maintain the quality of the facility and its service. The present owner is cutting back on necessary investment in order to make his bottom line look

better. In that situation, the station's market position, and the high cash flow margin, will usually begin to drop.

Obviously, small markets limit the earning potential of a station. Even small markets that are projected to enjoy attractive growth may not be compatible with an owner's financial needs. Often small market stations cannot improve revenue performance above the level of market growth unless the station has the leading share of the ratings, audience and advertisers' budgets.

Concurrent with analyzing the size, revenue and growth characteristics of any market, the buyer should understand the general philosophical and demographic makeup of the market. For example, if a buyer is most experienced at developing a Black or Urban formatted radio station, the quality of the market will depend on factors such as the Black and Hispanic demographics, the retail client base that caters to that demographic, and the percentage of total market retail sales and media advertising revenues that the client base represents. Such an evaluation could reveal that the target demographic will comprise 40% or more of the station's projected audience and that the ethnic retail base will contribute 20% or more to the station's total projected revenue.

Competition in Market

Careful attention must be paid to competitive media and their strengths, successes and failures in garnering revenue and capturing audiences and ratings. The basic criteria to be used for evaluating the competition include: 1) the quality of technical facilities; 2) each medium's share of the market revenues; and 3) each radio station's share of the audience. The media study should include other radio stations, broken down by: 1) AM, FM and format; 2) TV stations, broken down by UHF, VHF, network affiliation or independent; 3) future FCC station allocations; 4) cable penetration; 5) outdoor media, including billboards, buses and bus stop benches; 6) newspapers; and 7) shoppers, etc. The newspaper medium continues to be the largest recipient of advertising dollars in the U.S., and its major advertisers provide the greatest potential source for broadcast industry growth. One prominent analyst estimates that television outbills radio 2-3 to 1 and newspapers outbill television by 30-40%.[1]

In television, the top 50 markets are so clearly superior to lower ranked markets that it is meaningful to group similar market sizes together. In radio, no such easy division point is apparent, although there is generally more profit in the larger markets than in smaller markets. In the top markets such as New York, Los Angeles, Chicago and Philadelphia, as many as 60 or 70 different radio signals can be heard. As many as 50 radio stations have a large enough audience to show up in the ratings. Many of the stations are owned and operated by the big networks or large group owners with the money and experience that makes them difficult to beat. A small local station can still compete, however, with high powered ones if

the licensee can come up with the innovative programming, promotion and the resources to impact the audience.

One common competitive strategy is to enter a market which has strong competition and a high rate cards. The thinking here is that it is better to be number two in a strong market, and follow the leader, than to be number one in a weak market where everyone else is selling spots at rock bottom prices. The best advice for new owners, however, is to stay out of top-10 markets, unless you have a lot of money to use for promotion and a firm hand on superb management and programming talent.

Advertising rate structures should also be evaluated and compared among the media in a market. Factors of comparison should include rate card costs for: 1) national, network and local spots; 2) cost-per-thousand and other efficiency measures; and 3) average spot loads and inventory percentages of unsold time. Valid statistics may be very difficult to obtain unless the analyst has an intimate knowledge of the market and reliable contacts to gather the data.

Generally, a competing broadcast facility, be it AM, FM, or TV, has a performance history of ratings, and therefore, a predictable share of the available advertising dollars. Generating revenues and attracting audience is a function of a station's program appeal, signal quality and coverage, advertising and promotion quality, and the number and type of competing media. The station's ability to compete effectively for audience and revenue share will vary as any of these elements change. These data will help to determine the total amount of advertising dollars being supported by the market's level of retail sales, and the potential of a given station in the market to increase its share of these advertising revenues. This is precisely the kind of data which a "market buyer," as opposed to just a "station buyer," carefully considers.

Other factors, such as the quality of on-air talent and the sales and management staff, are also important to a station's success in the market. Yet, many analysts do not try to quantify these in a market evaluation. These factors vary greatly among stations, even within one station over time, and therefore, they are assumed to balance out over the long run.

Aberrations in Market

A buyer must examine the market for unusual or unique situations that could affect the game plan for building a successful station. It is not uncommon for a single station to enjoy a historical position of audience domination so great as to make the cost of effective entry into that market prohibitive. For example, hundreds of competing stations have been unsuccessful in dethroning longtime leaders such as KMOX in St. Louis, KDKA in Pittsburgh, WCCO in Minneapolis, WTIC in Hartford, WGN in Chicago and WJR in Detroit. Prices of competing stations for sale do not usually reflect the unique economic reality that the market has a ratings and revenue giant. WCCO in Minneapolis and KMOX in St. Louis are known to each have

secured over 50% of a major advertiser's budget, leaving the rest of the high-rated stations to split the remainder. These markets are strong enough, however, so that the "other" stations have been able to generate earnings without being the revenue leader.

Additional unique market factors to assess include format aberrations, imminent changes in the marketplace and seasonal cycles. For example, Beautiful Music formats have the best ratings during late fall and winter months. One reason for this is that holiday music fits very well into this format. Sports-image stations do best in the fall and spring. There is also a known positive correlation between a local team's standings and the listening levels of the station carrying its games. Teen listening is higher during the summer months and on weekends. Stations serving resort and vacation areas are prone to seasonal cycles for ratings and revenue. News/Talk stations do better during presidential election years and during unpredictable national and local crisis. A boom for Spanish language radio and TV stations occurred in Miami following the 1980 Mariel Cuban refugee influx.

The entry of new media into the marketplace can also have a profound effect on the competition, especially if an aggressive and well financed large group owner or network is planning to enter. As mentioned in Chapter I, revisions to FCC allocation policies in the 1980s will allow the entry of hundreds of new radio stations in the 1990s . A prospective new owner is advised to check with the FCC about any new applications filed or construction permits granted for additional facilities serving the market.

The Market Data Base

As already mentioned, information about the prospective station's market is critical in evaluating a station. Prospective owners should know the following information in order to evaluate the nature and size of any market:

1) Population;
2) Households;
3) Consumer spendable dollars (per capita);
4) Consumer spendable dollars per household;
5) Retail sales per market (total dollars);
6) Retail sales per household;
7) National rankings by:
    a) radio revenues,
    b) population,
    c) households, and
    d) retail sales;
8) Growth trends, past and future, of radio revenues; and
9) Principal employment and industries.

From these basic measures of market strength, the buyer can determine the following: 1) percent of national totals for the market; 2) the purchasing ability of the market compared to national and regional averages; 3) market revenue as a percentage of retail sales; and 4) trends that would indicate future market shifts of population, income and retail sales.

Data and Information Sources

Some of the data mentioned above can be gathered from the public library, using the latest editions of the *U.S. Statistical Abstracts* and editions of *Abstracts* published by each state. Standard Rate and Data Service (SRDS) also publishes various demographic, market and media guides available at the library. As with any public reference sources, conducting this type of library research is not always convenient and can be time consuming. Often, the latest editions of these references are not available.

Until 1980, the FCC published an annual report on broadcast finance showing revenue and profit data for every market in the country having three or more stations. Although the FCC no longer collects and reports this information, many market services and industry publications fill the gap by publishing a variety of market and financial guides. Serious broadcast investors are advised to subscribe to at least some of the available resources for the latest market and financial data. The following provide useful radio industry information:

NAB/BFM Radio Financial Report, published by the NAB, and available from NAB Services, 1771 N Street, N.W., Washington, D.C. 20036. Tel. 1-800-368-5644.

Published annually by the NAB in cooperation with the BFM. This soft-cover report includes over 100 charts and tables on: radio expenses, revenues and pre-tax profits, broken down by market size, station revenue size, AM and FM stations and program formats. Managers and investors can use the data contained in this report as yardsticks to which they can compare a station's financial performance. This research is also well respected and helps to influence public policy and industry standards.

NAB/RAB Radio Market Trends, also available from NAB Services.

This annual report provides actual market level data collected by nationally known accounting firms who specialize in radio revenue data collection. While these market reports do not include every station, they do include most of the leaders in each market and can provide a good picture of a market's performance.

Broadcast Stats, published monthly by Paul Kagan Associates, 126 Clock Tower Place, Carmel, California 93923-8734. Tel. (408) 624-1536.

Primer on Radio Station Investment, also by Paul Kagan Associates.

Paul Kagan Associates is a prolific monitor of the broadcasting, cable and entertainment industries. The two Kagan publications listed above should be of particular interest to anyone involved in radio. Kagan publishes a variety of newsletters and source books (32 at last count), produces audio cassette series, and presents numerous seminars on the economic aspects of the broadcast and cable industries. Every publication includes useful charts, tables and data on all investment and transaction aspects of the industry.

Duncan's Radio Market Guide, compiled by James Duncan, Box 90284, Indianapolis, Indiana 46240. Tel. (317) 630-2888.

This annual publication examines the economic and demographic conditions of radio markets. Included are radio revenue histories and projections on a yearly basis; revenue estimates for almost 1,000 stations; revenue estimates for competitive media (TV, newspaper, outdoor); revenue per share point analysis; and a qualitative grading of each radio market based on such factors as competition, geography, quality of management and ownership, and the opinions of managers of radio stations. The guide is loaded with useful charts and rankings including a list of stations with gross revenues in excess of $10 million, and a list of markets with the highest revenues. Also included are listings of revenue estimates for the 60 smaller markets, or "condensed" markets ranked by Arbitron, a ranking of the top 175 markets by revenue per point, and a ranked listing of all the markets by population per station. The number of rated stations per market is also listed. This table is especially useful in determining if a particular market is over- or under-saturated with radio stations.

Duncan's American Radio, also by James Duncan.

The *Fall Edition* is published every February and covers 125 markets.

The *Spring Edition* is published every August and covers 175 markets.

Winter Edition covers those markets that subscribe to a Winter Arbitron ratings sweep.

Small Market Edition published annually and covers 125 markets.

American Radio is a complete and timely source book of radio industry ratings and programming information. It includes from 25 to 35 tables and rankings (depending on edition) and over 80 pages of national tables and rankings by format and demographics. *Small Market Edition* includes Arbitron's "condensed" markets and Birch's "non-monthly" markets.

Survey of Buying Power, published by *Sales and Marketing Management* Magazine, New York, NY.

This survey is published twice each year (Fall and Spring) and contains reliable statistics and growth projections on markets and demographics. The Duncan reports use much of the *Survey of Buying Power* data.

Investing in Radio, by Tom Buono, President of Broadcast Investment Analysts, Box 17307, Washington, D.C. 20041. Tel. 1-800-323-1781 and (703) 661-8515.

This is a source of information from the same publisher of another very successful annual report -- *Investing in Television*. The radio annual covers over 250 ranked markets and provides historical financials, revenue projections, growth outlooks and age demographics for each market. It also provides data on the technical attributes, owners, sales revenues, formats and Arbitron rating trends for radio stations serving each market. The appendix includes a yearly summary of radio station sales, including price, market size and facilities involved. The summary is very useful for comparing prices of comparable radio stations.

Spot Radio Rates and Data, published monthly by Standard Rate and Data Service, Inc., 3004 Glenview Road, Wilmette, Illinois 60091 Tel. (312) 256-6067.

Spot Radio lists the advertising rates and profile data on radio station facilities and personnel. Listings are arranged alphabetically by state, city and call letters. It also provides numerous tables of demographic and market information, including fourteen separate tables, and a master composite table, ranking all U.S. metros by market data categories of population, households, consumer spendable income (per capita and household), total retail sales and retail sales per household, food store sales, general merchandise store sales, apparel store sales, home furnishing store sales, automotive sales, service station sales, and number of passenger cars. Additional useful data includes a summary ranking of each television market ADI and DMA by 14 categories; a table of population demographic characteristics of age and sex broken down by metro areas; numerous tables providing complete farm population data; and the top metros by Black and Spanish populations.

Summary

- The second step a buyer should take is to evaluate the strengths and weaknesses of the market. Market evaluation involves analyzing the: 1) quality and quantity characteristics of the population and the economy; 2) the media competition; and 3) market aberrations.

- There are various acquisition and operation strategies that should be successful if the strategy fits the market and investment opportunities.

- Several publicly available data sources can help the buyer in acquiring market level data.

- Various companies provide information specific to radio stations and markets' performances.

Chapter IX:
Capital and Financing Sources

Broadcasting is a business fueled by debt capital and secured by mostly intangible assets, an odd combination accepted by lenders from which they have learned to profit. Traditionally, lenders have been concerned with two aspects of all loans -- risk and security. The risk incurred usually depends on: 1) the nature of the borrower's venture; 2) the duration of the loan and the interest to be repaid; and 3) the credit worthiness of the borrower. Security is usually a function of the lender's rights to recover the assets of the borrower and sell them to settle any outstanding debt. Positive experiences have shown lenders, however, that the broadcast operation is what really matters when it comes to minimizing risks and maximizing security. Thus, today's lenders are literally banking on the ability and experience of broadcast station owners to generate cash and increase the market value of their stations.

Lender Objectives

The objectives of lenders are to insure that the loans are adequately secured, to receive fair and equitable interest rates and to be repaid the loan principals when due. Securing the loan is the single most difficult concept for lenders lacking broadcast experience to understand. Security usually means having a lien on tangible assets. Yet, the single most important asset of a broadcast station is the FCC license -- an intangible asset. The station operator does not actually "own" the license. Rather, it is a franchise which is granted to the broadcaster for a period of years, and is renewable, barring rule or law violations or other substantive performance deficiencies of the licensee. Therefore, a sophisticated lender appraises the risk of the loan by evaluating the quality of the broadcaster's operations and management.

The tangible assets of a typical broadcast station represent only a small portion of the total investment. In addition, these assets generally have a greater value "in place" than they would have as repossessed equipment, buildings, towers and land. Rather than removing the station's equipment, a lender will typically take back a pledge of stock of the corporation which owns the station, and in the event of default, will attempt to take control of the property in a normal foreclosure proceeding. In such an event, approval must be obtained from the FCC for the transfer of a license to the successful bidder at a foreclosure proceeding. The FCC has a history of cooperating with lenders, as long as the prospective purchaser of the foreclosed assets meets FCC standards of character and financial reliability. Again, upon default there is no automatic transfer of the license to the lender or any other party -- the FCC must approve any transfer of the license.

Lenders will appraise the safety of their loans by attempting to assure that the station's cash flow will cover the debt service. For a typical loan, a conservative rule of thumb is for the cash flow to be at least double the annual debt service requirement. This is the critical measure for a lender, and is more important than the classic debt-to-equity ratio used in other industries. In the event of a problem, the 2 to 1 ratio allows a lender and borrower sufficient time to work with each other to correct the situation before the loan is at serious risk.

Variations in the cash flow to debt service ratio will depend on the size, stability and growth factors affecting the station's operation. For example, it is reasonable to presume a ratio as low as 1.5 to l for deals involving more than one station. On the other hand, it is unreasonable to expect a newly acquired station that needs substantial improvements in all aspects to generate enough cash flow during its first year of operation to cover twice the amount of interest.

Single source financing -- the total debt underwritten by one lender -- is becoming more the exception than the rule for financing large acquisitions. Combination finance packages are often used to cushion the debt for the senior lender. Today's typical financial structure of acquisition capital may consist of senior debt, equity, and sandwiched in between, subordinated debt from various sources. Often called "mezzanine financing" (because it is in the middle of senior debt and equity), the subordinated debt could be composed of bonds, warrants for the purchase of common stock, preferred stock, long term debentures and long term notes to sellers.

The ratio of debt to equity varies depending on how a deal is structured. Typically, a borrower might secure 40% of the purchase price (not including working capital) from the bank, 30% from the seller and the remaining 30% from equity investors. In this case, the debt to equity is 2.3 to 1.

As in the case with investors in broadcast stations, the number of knowledgeable lenders is not large, though growing every year. There is usually at least one banking institution in each market having some experience in communications and broadcast finance. With the increasing attention to broadcast during the last few years, however, more banks have begun to learn about the broadcasting business and the nature of "off balance sheet" financing of intangibles.

One aspect of broadcast lending these new lenders discover, is the variation in length of time needed to complete a deal. Only a few years ago broadcasters complained that it took the FCC too long to approve a transaction. Since then the Commission has become quicker at processing and approving transactions. The time period from FCC application to FCC approval can be as short as eight weeks. Broadcast deals are often taking longer than that to close because of the time needed for all the lending parties to iron out last minute problems. One prominent broadcast attorney complains that, while it used to take a morning to

overseeing a closing, it now requires a "camp-out for days in a conference room filled with accountants, brokers, bankers, nervous owners and buyers who are scared to death of it all."[1]

The best advice for buyers is not to go looking for a broadcast station until they have at least a general idea of where to secure the financing and understand the commitment. A good deal can be lost while you search for the money.

Banks

During the 1980s more banks aggressively sought to finance broadcasting acquisitions. Some of the major lenders believe that radio and television will prove to be among the top growth industries throughout the early 1990s. Some bankers are especially interested in radio because of its consistent revenue and cash flow performance and the market value of the license itself. Not all of the new broadcast lending banks are ready to lend to just any radio buyer. Most require the buyer to have prior ownership or management experience in radio.

Bank loans are generally amortized over a ten year period (or less) at interest rates that tend to float one-half to three points above the prime interest rate. That proved to be a disadvantage to some deals in the early 1980s compared to the fixed rate loans from other sources. Many acquisitions in 1979 financed with a floating interest rate may have looked like a good investment. Yet, as the prime rate rose during the early 1980s, many broadcasters found that they could not keep up with the ever-rising debt service.

Another drawback to bank loans is the large compensating balance requirements, which, in effect, increase the price of the loan by requiring the borrower to maintain large account balances. Banks provide various services "free" to their customers, such as check clearing, lockboxes, credit information, etc., services which cost the bank money. The interest earned by the bank on a customer's large deposit compensates the bank for its services rendered.

Banks will also provide revolving credit loans for working capital once the acquisition is made. The borrower is allowed to draw a certain percentage of the credit line for certain short term needs. In addition, many revolving loans are structured so that the borrower must take a minimum amount during the quarter, or be charged with a penalty "commitment fee." The fee generally ranges from 0.5% to 1% of the unused amount of the loan commitment.

Insurance Companies and Pension Funds

Institutional lenders, mostly insurance companies, are also going through an upswing in broadcast lending, but prefer to be involved in large multi-station deals requiring tens of millions of dollars. On the other hand, some have been known to lend as little as $2 million. Interest rates tend to be fixed at several points above the prime rate and a portion of the return often involves warrants on the common stock of the borrower.

One advantage of an insurance company over a commercial bank is that the length of the loan term can run as long as 15 years. In contrast, banks lend for periods of five to seven years, with a ten year maximum. While lending for longer periods, the lending practices of insurance companies tend to be more conservative than those of banks. Regulations in most states prohibit insurance companies from lending to proprietorships and partnerships. Five years of audited financial statements are also often required. Generally, the average annual cash flow from the previous three years and the projected cash flow from the current and succeeding two years must be sufficient to provide equal amortization of 150% of the loan value over a ten year period.

Pension funds, like insurance companies, are also closely regulated. They are less likely to finance large transactions because their asset base is much smaller compared to insurance companies.

Finance Companies

Finance companies continue to be sources of broadcast loans. These are known as "fully secured lenders" since their loans are based on the value of the station's tangible and intangible assets, rather than on the net earnings which are generated. The loan term offered is similar to those offered by banks, in the five to ten year range, but the interest rates run as high as five to six points over prime. In addition, financing companies will often require an equity kicker to enhance its yield.

Venture Capital Firms

Venture firms help borrowers find capital in return for interest payments and an equity share of the acquisition. The interest rates tend to be slightly higher than the rates charged by banks. Equity interest usually comes in the form of stock, or warrants, and generally ranges from 20% to 70% of the borrower's equity position. In addition, venture firms will command a large rate of return on their investment -- often a minimum compounded annual return of 40% over the term of ownership. The return can be that high because venture firms will make their profits on the resale of the station, thus cashing in on their large equity interest. This is one reason why the financing is sometimes referred to as "vulture capital." Venture capital is

often talked about as a financing source by people who have very little experience in dealing with venture firms. Most venture firms are very selective in the deals in which they participate, and actually get involved in less than 2% of the deals presented to them each year.

SBIC and Minority Capital

Small Business Investment Corporations (SBICs) are rapidly becoming a scarce source of capital. The Small Business Administration (SBA) licenses SBICs to provide funds to qualifying new enterprises and minorities. During the 1980s, government support for SBICs was decreasing. When available, the funds are in the form of either equity, or debt with related equity involvement.

Special lending sources are also available for minority broadcasters. Some are part of the Minority Enterprise Small Business Investment Companies (MESBICs), chartered specifically to help members of minorities acquire broadcast stations. Other lending plans, targeted at minorities, have been established by major corporations in the broadcast industry. BROADCAP, set up by the NAB, is the latest source of funding for minority broadcasters. Over its eleven year history, BROADCAP has issued 48 investment commitments totalling $17.4 million. These investments have in turn helped to secure and leverage $90.5 million in additional debt and equity financing for 41 minority owned companies. Of these 41 minority owned companies, BROADCAP has funded 29 to date, for a total of $11.5 million invested in the construction or acquisition of 41 minority owned radio and television stations. BROADCAP's portfolio is diverse, comprised of 25 AMs, 12 FMs, 3 UHFs, and 1 VHF station, with ownership approximately two thirds Black and one third Hispanic in origin.

Investment Bankers

Investment bankers have taken a more active role in broadcast finance over the past few years. Their traditional role is as underwriters of securities and bond issues and as arrangers of mergers. Lately, investment bankers have been arranging financing for large acquisitions and taking an equity position in the deals. Often they structure the financing by syndicating the participation. They attract investors interested in significant capital gains from the future sale of the company assets after a three to five year period. (A profitable turnover within five years reflects the typical financial picture of broadcast station ownership over the past 50 years.) Investment bankers tend to get involved in deals where the management has a strong track record of successful broadcast operations.

Limited Partnerships

Limited partnerships have become increasingly popular as a means of purchasing radio and television stations. By definition, a limited partner is only an investor and has no control over the corporation. Until the 1986 Tax Reform Act, there were tax advantages which allowed the limited partner to deduct from his or her personal income statement a share of any taxable losses based on the amount of the investment. The ability to defray income this way was severely restricted by that legislation.

Many analysts are critical of the overuse of limited partnerships and claim they are nothing more than a tax gimmick which limited the natural cash flow growth of a broadcast station. Limited partnerships are used more widely in television than in radio acquisition, because television acquisition financing demands a bigger equity base. Limited partners look for secure investments. Radio tends to be more volatile than television because radio revenues tend to swing more widely and quickly while television revenues are generally more predictable. Still, limited partnerships are being used increasingly in radio by a small, closely knit group of people, such as doctors, lawyers and other professional groups, because the FCC has not signaled any opposition to their use. The Commission tends to be more concerned with the attribution of ownership control by the general partner.

Equipment Suppliers

Suppliers of broadcast equipment are often an overlooked source of financing. The finance terms are usually very attractive and are used as an incentive to enhance the sales of their large equipment packages. Such financing can help a new broadcaster free up cash for operations and debt service on their larger loans. Required down payments may run as little as 10% or as high as 25%. A deferred payment plan can be used with no payments due for a year or two. Payback periods seldom run more than five years. Interest rates are generally fixed at 2.5-to-3 points over prime. Often, security is not required, other than the equipment itself.

Open-end leases are also available with an option to buy at the end of three to five years. A word of caution is in order on equipment lease packages. Current finance charges are often built into the monthly lease payments and the charges are expressed as an "add-on" rate, rather than an "annual percentage" rate (APR). Because add-on rates are computed differently than APR, the effective interest charge of an add-on rate can be very high. Anyone using an equipment company as a source of capital should have a complete understanding of the financial commitment and impact on their debt service.

Table IX-1 summarizes the major lending sources and the terms and requirements of their loans.[2]

Table IX-1
Broadcast Lenders and Terms

	BANKS	INSURANCE COMPANIES	PENSION FUNDS	CREDIT FIRMS	SMALL BUSINESS INVESTMENT COMPANIES/ VENTURE CAPITAL FIRMS	
					Subordinated Debt	Equity
Term	Usually 5-7 years (Max. 10)	Up to 12 years (Max. 15)	5-7 years	5-10 years	Up to 5-10 years	N/A (a)
Rate of Interest	Usually Floating	Fixed	Fixed	Fixed or Floating	Fixed or Floating	(b)
Security	Secured	Secured or Unsecured	Secured or Unsecured	Secured	Secured or Unsecured	Unsecured
Personal Guarantee Required	Sometimes	No	No	Sometimes	Sometimes	No
Minimum	None	$2 million	$500,000	$100,000	$100,000	$100,000
Sweetener Required	No	Sometimes	Sometimes	Sometimes	Usually	N/A
Equity Prepayment	Somewhat Flexible	Yes	Yes	Yes	Yes	N/A
Balloon Repayment	Available	Available	Available	Available	Available	N/A
Moratorium On Principal Payment	Yes	Yes	Yes	Yes	Yes	N/A
Commitment Fee	Sometimes	No	No	Usually	Usually	Sometimes

(a) Most SBICs and Venture Capital firms use a practical guideline of liquidating equity investments within 5-7 years.
(b) Most target a minimum 30 to 40% compounded return on their investment.

Seller Financing

The most significant group of lenders are former station owners. Seller-financing is historically the most widely used source of borrowed funds during tight credit, as was the case in the mid 1970s and the early 1980s. Although currently not as prevalent due to the increased lending activity by banks and private markets, seller financing remains one of the most common forms of funds in purchases of small market and modest revenue producing broadcast facilities.

As in seller financing of real estate, the selling price may be a bit higher than the price in a strictly cash deal. Most seller financing is at a fixed interest rate that is generally lower than rates available from other lenders. Terms may also include interest only payments for the first few years coupled with a balloon payment after three or four years.

Seller financing may also involve the assumption of existing indebtedness. This can be good or bad for the buyer. It is a good situation if the debt carries a low interest rate for a long term and helps to reduce the cash needed for a down payment; but bad if the interest rate is high on a short term payback with an early balloon, lump sum payment, and/or an accelerated payout.

Assuming existing debt is not all bad for the buyer. It may force the seller to wait for his/her own payments until the previous note is paid off. If the station cannot pay off both the existing liability and the note to the seller the existing debt to others will come first. This is the other side of seller paper. It can come back to haunt the seller if the buyer is unable to service the debt. As a result, a number of stations bought during the early 1980s at higher interest rates turned out to be losers. The sellers were left holding the paper and the stations. This was especially true for small stations. The broker listings carry numerous situations where the sellers are looking for someone to assume their notes with no cash down. They want to walk away from a bad situation.

Generally, the buyer will pay about 30% of the purchase price down and the seller will finance the rest on terms. The 30% remains a common convention based on a pre-1981 tax rule that said a seller could not accept more than 30% of the selling price in the year of sale without reporting taxable income from the entire transaction at the time of sale. Under revised rules, there are no such limitations as to the income which may be earned in an installment sale. Income earned is reported in the year it is received.

There are specific rules for sellers in determining the amount of their installment gains reported in the year of the station sale. The 1986 Tax Reform Act included other changes with respect to installment sales (i.e., seller financing) and the calculation of the Alternative

Minimum Tax. Given the always changing nature of this part of the tax code, it is advisable for any seller to consult with their accountant or tax attorney before the deal is finalized.

If a bank is involved in the financing, the seller will have to take a subordinated position in the debt structure. In that case, a seller will usually finance less than 70% of the purchase price. In other words, there are not many sellers who would take a 70% subordinated position and still provide good financing terms to the buyer. If a buyer finds one, he or she had better look closely at the deal for hidden flaws. The bank certainly will wonder about the soundness of the deal because that kind of structure is usually too good to be true.

Sellers have learned to use creative financing techniques to work with buyers and still get the highest prices possible on the deal. Serialized notes are often used to structure the seller financing. For example, instead of paying a $1 million mortgage on a station, a buyer promises to pay off ten different notes valued at $100,000 each. Assuming a 10% interest payment (simple interest for the purpose of this example), the first note is retired at the end of a year for $110,000. After year two the payment is $120,000; in year three it is $130,000, and so on. Buyers do not burn up their deductions in the early years. Sellers get the advantage of guaranteed larger cash payments later on when they might need more capital to finance a venture.

Another creative seller financing option is the use of cash flow bonus agreements, whereby the seller accepts very little down in return for an interest in future cash flow achieved above projected buyer goals. Prepaid interest may also be used to bridge the gap between a low cash down payment and the seller's need for cash at the time of transfer. Split interest rates are often used in combination with balloon payments and prepaid interest structuring.

According to annual surveys from 1980 through 1988 by Paul Kagan Associates, Inc., average seller-financed interest rates ranged from 10.5% in 1982 to 9.7% in 1988, with the annual average payback terms ranging from a high of 8.9 years in 1982 to 7.9 years in 1988.[3] The average loan amounted to about 65% of the radio station purchase price.

A seller-financed 10% interest rate favors buyers compared to money market lending rates of 11% to 16%. Obviously, the cost of capital will have an impact on the earnings and net cash flow projections, holding all other things constant. Depending on the buyer's objectives, differing outcomes may be achieved. For example, at a 10% interest rate, it is possible to make enough on which to live. However, at a 15% interest rate, the buyer sacrifices income and relies on the increased equity value of the station in future years to justify the investment. Of course, debt financing is a balancing act whereby the station owner must generate enough operating income to service the debt. If the debt level is too low, the owner is not taking full advantage of equity leverage and tax deductions for interest. If the debt is too high, the station risks its ability to service the debt and increase the owner's equity value. By using creative and combination financing plans, a variety of tailored outcomes can be achieved to meet specific objectives. New station buyers should consult investment bankers

and financial consultants for assistance in devising the best structure for a proposed acquisition.

Impact of Interest Rates

Table IX-2 shows the impact of borrowing at 10% and at 15% for a hypothetical station bought for $2 million. In the first situation, the buyer pays $580,000 cash down and the seller finances the balance of $1.42 million over a ten year period. In the second situation, the buyer finances the $1.42 million with a bank at 15%. In both instances, revenues and expenses are projected to increase 10% annually. Federal and State income taxes are estimated at 25% of the first $50,000 of taxable income, and 40% on the balance.

Debt repayment would become more difficult in the 15% scenario if the station underwent cyclical performance or experienced flat earnings in any one set of years. In fact, in this 15% example the station is barely covering its interest payments the first year. In the 10% scenario, the buyer could reduce the debt and use the station as collateral to support loans to acquire additional stations. Clearly, the lower interest rate provides some cushion for unexpected poor market conditions.

Convincing The Lenders

Once the prospective buyer has gained a working knowledge of the capital markets, the next step in raising the external funds will be to prepare a financial proposal. All proposals should address the perspective of the lender, since a lender's primary criterion for granting a loan or investment is the degree of risk exposure. The lender must assess the borrower's ability to generate enough cash flow to service the debt and the likelihood of recovering the principal in the event of default. Therefore, lenders are primarily interested in operational results -- historical and projected.

A thoughtfully prepared business plan should include the following:[4]

1) History and description of the station's operations and assets to be purchased, including facilities, signal coverage, programming, staffing and image.

2) Market information including audience surveys, descriptions of competing stations, demographic data on existing and underdeveloped audiences, advertising dollars in the market and dollars directed at the target audience. The larger the market, the easier it is to obtain information from industry publications.

Table IX-2
Ten Year Loan Schedule at 10% and 15%
($000)

YEAR	1	2	3	4	5	6	7	8	9	10
Revenues	880	968	1,065	1,171	1,288	1,417	1,559	1,715	1,886	2,075
Expenses	661	726	798	878	967	1,064	1,169	1,278	1,415	1,557
Cash Flow	219	242	267	293	321	353	390	437	471	518
Interest(10%)	142	135	127	116	104	89	73	54	30	4
Depreciation	40	40	40	40	40	40	40	40	40	40
Income	37	67	100	137	177	224	277	343	401	474
- Taxes	9	21	36	54	73	96	126	149	181	216
Net	28	46	64	83	104	128	151	194	220	258
+ Depreciation	40	40	40	40	40	40	40	40	40	40
Net Cash Flow for Principal payments:										
	68	86	104	123	144	168	191	234	260	298
Note	1,420	1,352	1,266	1,162	1,039	895	727	536	302	42
less principal payments:										
	68	86	104	123	144	167	201	226	260	298
Balance	1,352	1,266	1,162	1,039	895	728	526	310	42	-0-
Interest (15%)	213	212	208	199	186	170	152	128	99	65
Depreciation	40	40	40	40	40	40	40	40	40	40
Income	-34	-10	19	54	95	143	198	269	332	413
- Taxes	0	0	0	7	34	57	84	113	147	186
Net	-34	-10	19	47	61	86	114	156	185	227
+ Depreciation	40	40	40	40	40	40	40	40	40	40
Net Cash Flow for Principal Payments										
	6	30	59	87	101	126	154	196	225	267
Note	1,420	1,414	1,384	1,325	1,237	1,136	1,010	856	660	435
less principal payments										
	6	30	59	87	101	126	154	196	225	267
Balance	1,414	1,384	1,325	1,237	1,136	1,010	856	660	435	169

3) Historical financial statements for the past five years. These are not always available for that long a period. Many stations are trading faster, and therefore, the current owners may not have those statements. The very least the present owners can provide are the current financials to date and the budgeted amounts for each category.

4) Five year pro forma projections of operations, including assumptions about revenues and expenses. These should address the range of possible outcomes, i.e., good performance, poor performance and middle ground.

5) Description of the proposed financing, including investor equity and debt participation.

6) Description of the use of borrowed funds. These include funds for purchasing assets, consolidating assumed debt, capital improvement projects, operations, promotions, consultants, etc. A new owner must plan to have sufficient funds to develop the new station for at least 18 to 24 months after acquisition.

7) Operations strategy, including programming, promotional activities, sales policies, expenses, management and additional borrowing plans for short term and long term debt.

8) Description of the buyer, including biographical material on key officers, organization and management, financial structure and outside consultants.

9) Discussion of applicable FCC regulations if a lender or investor is unfamiliar with the nature of FCC licensing and the implications for operations and risk.

10) Purchase price rationale, based on analysis of financial statement history and projections, similar station sales, market attractiveness and growth and discounted cash flow projections.

Additional Considerations

Lenders are also concerned about management and financial expertise within the borrowing group, since they are more concerned about cash flow from operations than with market values, which tend to fluctuate. Residual value, or the projected value of the station for resale at the end of the payback period, is the least convincing argument for a buyer to use with a lender. Bankers, however, usually look to lend against a liquidation value at an equal or better level compared to a lender's exposure on a loan.

Above all, borrowers must be prepared to educate lenders on the unique nature of the broadcasting business. Under FCC regulations, a security interest in the most valuable asset, the license itself, is not possible. Banks will often insist on a pledge of stock as collateral. There is no legal problem with such a pledge as long as the bank is aware of the FCC limitations on stock ownership. For example, before the bank may foreclose on the loan and register the stock in its name, the FCC must approve the transfer. Without FCC approval, the bank cannot exercise any degree of control or ownership. As more U.S. banks become controlled by foreign banking syndicates, the usually sticky problem of foreclosing on an FCC licensed property may become even more complex.

The borrower should avoid overly restrictive terms and covenants in a loan. Some of the particular terms that do not mix with broadcasting include disposition of assets, restrictions on future acquisitions, and additional indebtedness. Stations operating in seasonal markets or undergoing format changes may find it difficult to meet restrictions on minimum balance sheet maintenance ratios and amounts. Some of the most restricting covenants in a loan may concern the loss of a key manager or death or loss of service of a principal. Some loan covenants call for a default of the loan and a demand payment of the balance if a key person leaves the borrowing group.

Finally, the borrower must consider all of the costs associated with the loan. All financial institutions will charge the borrower "facility fees" incurred by the lender for preparation of loan documents and security agreements. Some may even charge fees for reviewing the financing before making any commitment to provide funds. Other charges may include accounting fees, appraisal fees, inspection fees and additional life insurance on the key officers. The facility fee generally ranges from 0.5% to 1% of the total loan amount, plus additional charges for special professional services, such as those mentioned above.

Information Sources

Among the best guides for gaining an accurate overall picture of broadcast lending sources are the following:

Broadcast Financial/Legal Service Guide

Broadcast Investment Analysts
P.O. Box 1730
Washington, D.C. 20041
Tel. 703-478-5880

The guide summarizes the loan requirements of leading broadcast lenders, based on a 1988 survey. Loan managers and phone numbers are listed for each profiled lender.

Broadcast Financial Record
Paul Kagan and Associates, Inc.
126 Clock Tower Place
Carmel, California 9392
Tel. 408-624-1536

Broadcast Banker/Broker (BBB) and *Broadcast Investor* (BI)
Paul Kagan Associates, Inc

These two monthly newsletters cover various topics of interest to broadcasters, commercial lenders, media brokers and financial analysts.

BBB focuses on private transactions of radio and television stations. It also discuses how the acquisitions were financed, and the roles played by the lenders and media brokers in the deals. Each issue provides a list of the transactions announced by media brokers. Two yearly special BBB issues include: 1) a directory of the top broadcast lenders and venture capital investing firms and a profile of their outstanding loan commitments; and 2) a directory of top broadcast station brokers including data on the number and dollar volumes of deals.

BI focuses on events in the public marketplace. The newsletter's emphasis is on the asset values and the stock price values of public companies, and how these values are impacted by mergers, acquisitions and other transactions.

Paul Kagan Associates, Inc. also presents broadcast acquisition and finance seminars in various cities throughout the year. The seminars feature leading experts in the broadcasting industry, including financial managers, lenders, media brokers and station owners. Audio cassette series are also available for each seminar.

Summary

- Lenders who specialize in broadcast acquisitions have a special insight into the nature of the radio industry where debt capital is often secured by intangible assets.

- An experienced broadcast lender will determine the risk of a loan by evaluating the financial aspects of the proposed station and its market. The lender will carefully consider if the station is capable of generating enough pre-tax cash flow to cover debt service and principal repayment.

- Most lenders will carefully review the quality of the prospective buyer's operation plan and management experience before committing to a loan. Many lenders will not provide funds to an inexperienced broadcaster unless experienced radio managers are placed in key positions.

- Single source financing is becoming the exception for large acquisitions. The common sources for acquisitions include local and money center banks, insurance companies and pension funds, finance companies, investment bankers, SBICs and venture capital firms. Limited partnerships and equipment suppliers are additional sources of capital.

- Special lending sources and assistance are available to minorities for acquiring broadcast stations.

- Seller financing is the single largest source of debt capital for radio station acquisitions. Generally, sellers provide better terms and conditions for debt repayment than commercial lenders. A station purchased on installment terms is, however, usually priced higher than a station purchased on a cash basis.

- There are numerous creative ways to structure an installment sale, including serialized notes and cash flow bonus agreements, that will meet the needs and objectives of sellers. However, the primary need of a seller is to feel secure that the buyer will have the management talent to successfully operate the station and service the debt.

- Various publications, devoted to broadcast station acquisition and finance, provide an accurate overview of broadcast lending sources and financial trends in the industry.

Chapter X:
Financial Statement and Cash Flow Analysis

There is no known formula for a quick and accurate assessment of a station's worth. Formulas serve only as rough estimates because each market and each transaction must be considered for its unique characteristics. The prospective buyer should have a thorough understanding of broadcast financial statements and the factors that determine profits before he or she can hope to evaluate a proposed station's purchase price and value. There are three key financial areas on which a knowledgeable buyer should concentrate: (1) the station's balance sheet; (2) the income statement; and (3) the earnings and cash flow projections.

Balance Sheet Structure

One of the most difficult concepts for non-broadcasters to understand is the nature of the balance sheet. Since broadcasting is essentially a cash business, tangible assets represent a small portion of the total asset value of the station.

Table X-1 reflects the balance sheet for a typical top-50 market radio station. The station has a good position in the market and good revenue and profit performance. The figures reflect the station at about the time it was for sale, but do not reflect the fact that it eventually sold for more than $6 million. That, however, is the nature of broadcasting. A station's market value is often much higher than its book value.

Table X-2 shows the balance sheet for a newly acquired radio station in a smaller market. In this example, the value of the intangible assets -- primarily the license -- reflects the majority of the station's value. The new owner paid $1.5 million for this station and revalued the fixed assets by about 20% over their net asset value (as listed on the seller's balance sheet). Again, there is no way of telling what the future market value is by simply examining the balance sheet.

The difference in the allocation of book values between the two stations demonstrates the varying degree of leverage required for purchasing each station. For example, the ratio of long term debt and equity to the current liabilities tend to differ between large market and small market stations. In the larger market facility, long term debt and equity is more than the current liabilities, whereas in the smaller market station the ratio is less. In other words, more debt financing is required to purchase a more expensive station. In addition, the larger market station's fixed assets, compared to the intangible assets, account for a larger share of the station value. In the small market balance sheet, the fixed assets comprise a smaller share of the station's total value. Thus, there is a greater opportunity to increase the tax deductions for

Table X-1
Balance Sheet for Top-50 Market Station
($000)

Current Assets	
Cash	$140
Accounts Receivable	$300
Prepaid Expense	$60
Total Current Assets	$500
Fixed Assets	
Land	$100
Buildings & improvements (net of dep.)	$295
Technical Equipment (net of dep.)	$660
Transportation (net of dep.)	$308
Total Fixed Assets	$1,363
Intangible Assets	
FCC license and goodwill	$1,240
TOTAL ASSETS	$3,103
Current Liabilities	
Current maturity of long term debt	$48
Accounts payable - cash	$180
Accounts payable- barter	$100
Accrued expense	$160
Accrued taxes & interest	$30
Notes payable - bank	$6
Total Current Liabilities	$524
Long Term Liabilities	
Note payable (former owner)	$715
Stockholders equity	
Common stock	$187
Paid in capital	$207
Retained earnings	$503
Treasury stock	$967
TOTAL LIABILITIES & EQUITY	$3,103

Table X-2
Balance Sheet for Small Market Station
($000)

Current Assets	
Cash	$40
Accounts Receivable	$180
Prepaid Expense	$45
Total Current Assets	$265
Fixed Assets	
Land	$40
Buildings & improvements (net of dep.)	$155
Technical Equipment (net of dep.)	$300
Total Fixed Assets	$495
Intangible Assets	
FCC license and goodwill	$850
TOTAL ASSETS	$1,610
Current Liabilities	
Accounts payable - cash	$25
Long Term Liabilities	
Note payable (former owner)	$1,120
Stockholders equity	
Paid in capital	$465
TOTAL LIABILITIES & EQUITY	$1,610

depreciation expenses in a large market station compared to a small market station. As will be discussed in Chapter XI certain intangible assets (e.g., FCC license) are not depreciable.

From an operations standpoint, the most important items in the balance sheet relate to cash and working capital. Again, broadcasting is essentially a cash generating business, with a relatively small capital expenditure requirement. Receivables turn over quickly. In slow economic cycles, when credit is tight, broadcasters (similar to other cash businesses) experience a slowdown in account collection and the ratio of assets to liabilities may go to a low level -- 1.25 to 1 or lower. Too low a ratio will impede the station's ability to maximize the use of its cash in operations.

The Income Statement

This is perhaps the most important financial statement for a buyer to analyze in a proposed station sale. While every station is unique, the income statement should reveal any major problems in operation. When analyzing a station's income statement, it is a good idea to compute revenue items as a percentage of gross revenue, and expense items as a percentage of total expenses. These percentages can then be compared with station benchmarks for comparable stations shown in the *NAB/BFM Radio Financial Report*.

Table X-3 shows income statements for average radio stations in large, medium, small and very small markets. Table X-4 shows the revenues, expenses and pre-tax profit margins for average stations nationwide in 1988. The stations are listed by type -- AM, FM, AM/FM Combo, and AM Daytime. Selected expense items are also listed along with their percentage of net revenues. All the data is based on the annual survey by the NAB and BFM.

Generally, the expense breakdowns of a medium market radio station are not much different from a small market station, with the exception of programming, promotion and news. Figure X-1 displays the distribution of expenses for the average radio station nationwide. With more stations entering the marketplace, cost containment is as much a key to profits as revenue production. In large markets, labor costs, unionization and high priced talent can lead to a difficult situation. That is one reason some buyers prefer medium and smaller market operations. In terms of operating profits, a dominant station in Tulsa may outperform a loser in New York.

From an income standpoint, there is much more to be gained from owning a larger market station compared to a small market operation. Generating revenue at a medium market station costs about the same as sales efforts at a small market station, with the exception of sales commissions and sales staff. In a typical large radio market, the station will have a general sales manager, a local sales manager, and a half dozen sales people. For smaller market stations, the focus is on local sales and there is no division of responsibility for local, regional and national sales. The small market station relies almost totally on the national spot sales representative for any buys that are not local.

Table X-3
Station Income Statement by Market Size - 1988
($000)

	Large	%	Medium	%	Small	%	Very Small	%
Revenue (a)								
Network	$154	1.9%	$29	1.5%	$6	0.9%	$3	1.2%
National	$1,878	23.3%	$416	21.5%	$113	16.1%	$23	9.4%
Local	$6,017	74.8%	$1,486	77.0%	$582	83.0%	$219	89.4%
Total Time Sales	$8,049		$1,931		$701		$245	
LESS Comm.	$1,257	15.6%	$250	12.9%	$42	6.0%	$6	2.4%
PLUS Other	$125		$46		$19		$5	
Net Revenues (b)	$6,917	85.9%	$1,727	89.4%	$678	96.7%	$244	99.6%
Operating Expense (c)								
Engineering	$244	4.6%	$73	4.2%	$32	4.7%	$12	5.1%
Program	$1,245	23.4%	$329	19.0%	$147	21.6%	$52	22.1%
News	$248	4.7%	$54	3.1%	$25	3.7%	$10	4.3%
Sales	$1,065	20.0%	$337	19.5%	$140	20.6%	$41	17.4%
Promotion	$881	16.6%	$150	8.7%	$35	5.2%	$4	1.7%
Gen. & Adm.	$1,633	30.7%	$787	45.5%	$300	44.2%	$116	49.4%
Tot. Oper. Expenses	$5,316		$1,730		$679		$235	
Pre-Tax Income (d)	$1,601	23.1%	($3)	-0.2%	($1)	-0.1%	$9	3.7%
LESS								
Deprec.& Amortiz.	$363		$222		$74		$27	
Interest	$246		$158		$45		$14	
Pre-Tax Cash Flow (e)	$2,210	32.0%	$377	21.8%	$118	17.4%	$50	20.5%

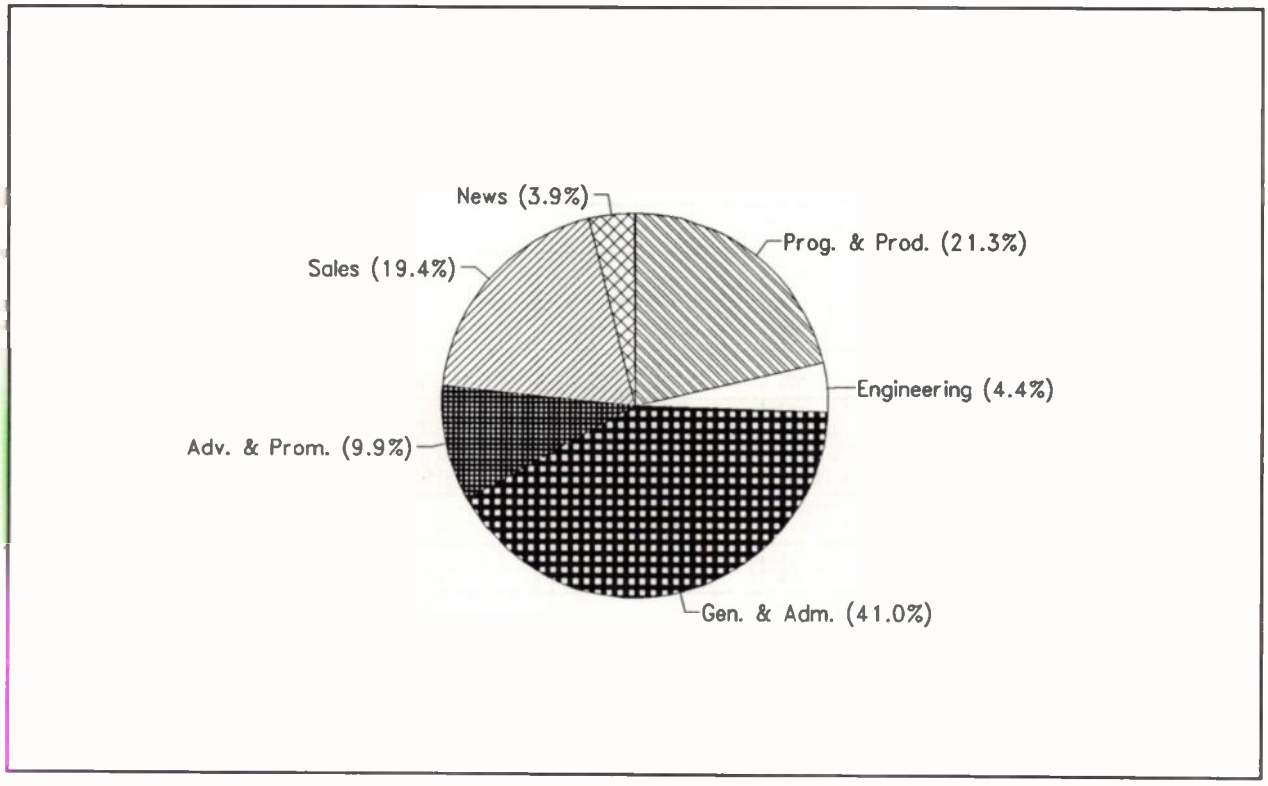
(a) Revenue percentages are shares of Total Time Sales. (b) Net Revenue after agency commission expenses and addition of "other" revenues. Percentages are shares of Total Time Sales. (c) Department expense percentages are shares of Total Oper. Expenses. (d) Pre-Tax Income percentages are shares of Net Revenues. (e) Cash Flow is Pre-Tax Income plus Depreciation & Amortization plus Interest. The percentages are shares of Net Revenues.

Table X-4
Station Income Statement by Station Type - 1988
($000)

	AM Fulltime	%	FM	%	AM/ FM	%	AM Daytime	%
Revenue (a)								
Network	$22	2.3%	$24	1.6%	$20	1.5%	$3	1.2%
National	$202	20.9%	$315	21.0%	$272	20.1%	$36	14.1%
Local	$741	76.8%	$1,161	77.4%	$1,058	78.4%	$216	84.7%
Total Time Sales	$965		$1,500		$1,350		$255	
LESS Comm.	$111	11.5%	$198	13.2%	$150	11.1%	$15	5.9%
PLUS Other	$20		$32		$22		$4	
Net Revenues (b)	$874	90.6%	$1,334	88.9%	$1,222	90.5%	$244	95.7%
Operating Expense (c)								
Engineering	$39	4.9%	$47	3.8%	$52	4.5%	$11	4.8%
Program	$196	24.9%	$248	20.2%	$239	20.7%	$51	22.4%
News	$59	7.5%	$29	2.4%	$41	3.5%	$9	3.9%
Sales	$144	18.3%	$246	20.1%	$227	19.6%	$37	16.2%
Promotion	$71	9.0%	$164	13.4%	$98	8.5%	$14	6.1%
Gen. & Adm.	$279	35.4%	$492	40.1%	$500	43.2%	$106	46.5%
Tot. Oper. Expenses	$788		$1,226		$1,157		$228	
Pre-Tax Income (d)	$86	9.8%	$108	8.1%	$65	5.3%	$16	6.6%
LESS								
Deprec.& Amortiz.	$53		$136		$124		$21	
Interest	$35		$78		$101		$18	
Pre-Tax Cash Flow (e)	$174	19.9%	$322	24.1%	$290	23.7%	$55	22.5%

(a) Revenue percentages are shares of Total Time Sales. (b) Net Revenue after agency commission expenses and addition of "other" revenues. Percentages are shares of Total Time Sales. (c) Department expense percentages are shares of Total Oper. Expenses. (d) Pre-Tax Income percentages are shares of Net Revenues. (e) Cash Flow is Pre-Tax Income plus Depreciation & Amortization plus Interest. The percentages are shares of Net Revenues.

Figure X-1
Distribution of Expenses
Average Radio Station-1988



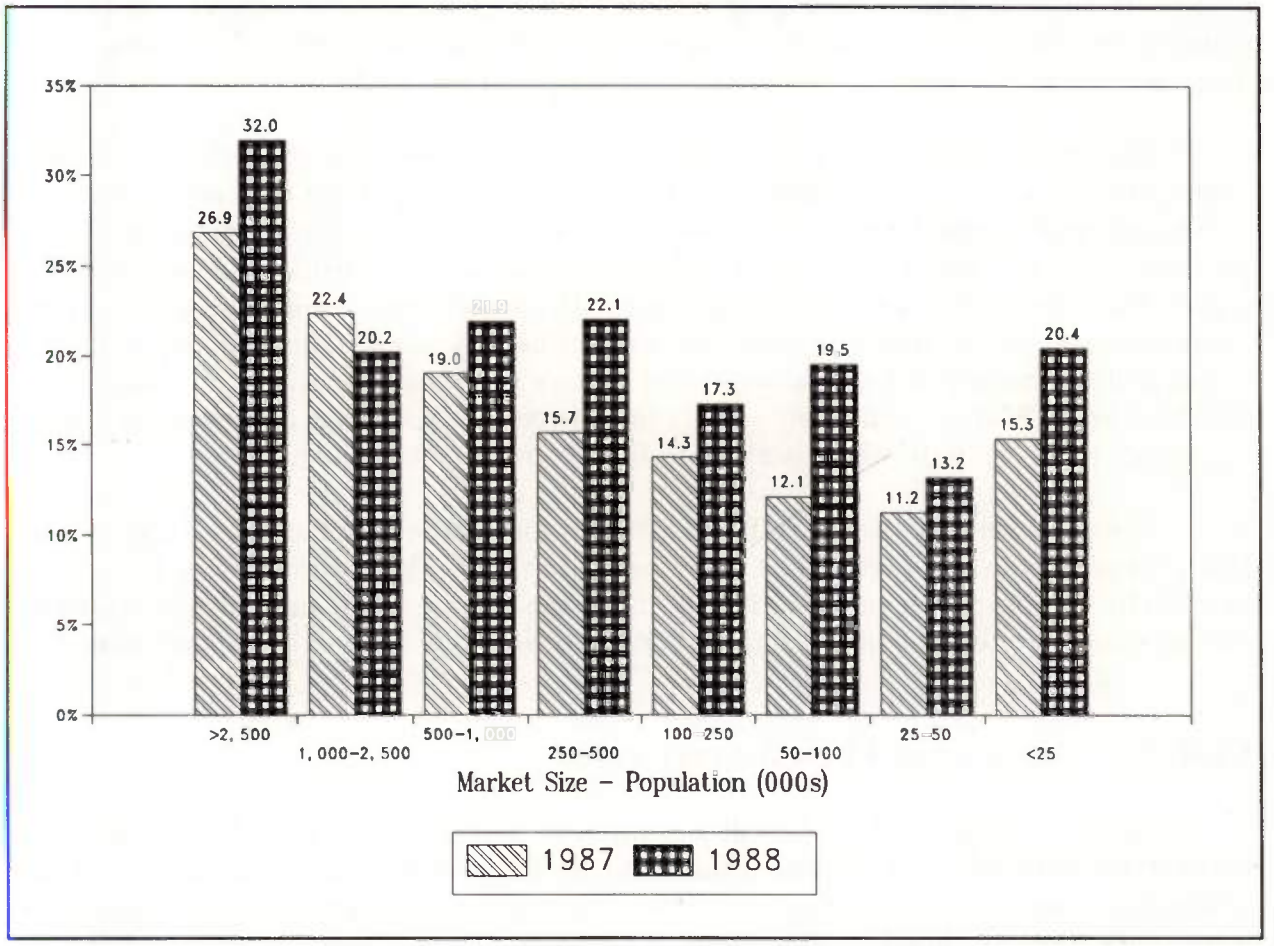
Operating Profit (Cash Flow)

Operating profit, or "cash flow", is the single most meaningful measure of the value of a station. Cash flow is defined as income from operations before charges for depreciation, amortization, interest, taxes and repayment of principal debt. Evaluating the ratio of cash flow to net revenues provides one of the best tests of management efficiency, especially when measuring a station's results against industry standards. After analyzing cash flow, the buyer can begin to project probable future growth of the station and decide if he or she can improve station profits over what the current owner had been able to accomplish.

Figure X-2 shows the cash flow margins for all radio stations, in 1987 and 1988. The data is presented by market size and is based on the annual surveys by the NAB and BFM.

Certain items may be of an extraneous or non-recurring nature and should be added to, or subtracted from projected income. For example, there may be above average salaries, dividends, management fees, etc. taken out by absentee owners or officers who are not involved in the daily operation of the station. There may also be personal expenses of the owner paid by the station, such as life insurance, travel and entertainment, country club

Figure X-2
Cash Flow Margin by Market Size
1987-1988



membership dues, long distance calls, etc. The costs for these items should be subtracted from expenses to accurately determine cash flow. On the other hand, if there are many outstanding barter deals, those should be subtracted from revenue and the stated operating profit. The more involved station ownership is in the operations, the more likely that barter and personal perks will be hidden in the cash flow. This is especially true in smaller market operations.

Cash Flow Impact on Debt Service

The ratio of cash flow to debt service determines if a broadcast company is financially sound. Typically, senior banks will lend 40% to 55% of a station's aggregate purchase price and working capital needs for a year of operations, or 4-to-6 times projected first year cash flow. The range of financing, which varies widely depending on the station and borrower, has been shown to be consistent during the past five years.

Analyzing the debt-to-equity ratio does not provide the whole picture. Broadcast companies may report debt-to-equity ratios of 2 to 1, 4 to 1, or more, and they are still great profit performers and are appreciating in value. Why? Because these same companies have planned the timing for their debt service to take advantage of their projected cash flow growth. The timing of the payments is more important than the value of the actual indebtedness.

Most station buyers want to generate income, build equity and receive capital gains from a future resale. As mentioned in Chapter IX, many buyers prefer to minimize their own investment and reduce their own business risk by using debt capital to "leverage" the station purchase. The wise buyer will plan on sufficient capital to meet the operational needs of the station for at least 18 months after acquisition. There will be times in a station's operating cycle, however, where adequate cash flow will not be generated. This situation commonly occurs at the beginning of a new management team or programming format. The naive owner fails to plan for "Murphy's Law", or -- what can go wrong will go wrong, and always at the least opportune time. Thus, leverage is a wonderful servant but a terrible master.

A wise buyer will also make financial plans for debt service based on projected cash flow, depreciation and taxes. The naive buyer foolishly plans debt service based upon hypothetical appreciated value for the station in the future. While annual appreciation in station values can run as high as 80%, station depreciation of value is not uncommon.

Cash Flow Analysis and Fair Market Value

Analyses of hundreds of broadcast station sales transactions reveal little correlation between the sales price and the values shown on the financial statements. A good correlation, although certainly an imperfect one, is between sales price and station revenues. Generally, three quick "rules-of-thumb" are often used to evaluate the revenues.

The first is the total market revenues, listed in industry resource guides and, up until 1980, FCC reports. Buyers could look at a particular profit rank of a market and decide that a station was a good or bad investment based on its facilities and position in the market. That kind of evaluation remains the most basic and the one prone to a wide degree of miscalculation.

A second, often used and abused method is to price a station based on a multiple of gross revenues. As mentioned earlier, the varying use of barter and trade, advertising rate structures, and account collection policies creates an unreliable situation for using multiples of revenues.

A third, more reliable evaluation method, uses multiples of a station's cash flow. If all three methods happen to come up with results that closely coincide and correlate, then the

buyer has a pretty fair idea of what the station is worth. However, correlation of results from these methods is more the exception than the rule.

Station prices continue to be a function of a buyer's estimate of the station's cash flow generating capabilities. Typically, broadcast stations are sold for a price ranging from 7-12 times cash flow. Of course that is only an average; many stations are sold for multiples way above and below that range. Multiples, based on revenue, range from 2-4 for broadcast stations, but generally are no more than 2-3 for radio stations. A buyer might be willing to pay on the high side for an established station with a track record of increasing revenue growth in a growing market with little competition. The same buyer might pay a lower multiple for a new station without a history of stable earnings, with poor signal coverage, aging and inadequate facilities, or one in a stagnant market. Stations with no record of earnings, or stations requiring substantial improvements, are impossible to value using a measure of existing or past cash flow. In those situations, revenue multiples, projected cash flow performance and market projections are the only alternatives for pricing.

Historically, the level of transactions in the broadcast industry has fluctuated widely with the health of the economy and interest rates. Changes in interest rates are reflected most often in price-to-cash flow multiples at which stations are purchased. It is generally an inverse ratio -- the more it costs to borrow money, the lower the multiples. In times of high interest rates, it becomes a buyer's market, and seller's are forced to deal at lower multiples.

Future Cash Flow and Turnarounds

The term "cash flow" has been used and abused so often that it has come to mean different things. Sellers tend to use cash flow to mean projected cash flow, and then paint a very rosy picture to a buyer. Likewise, buyers tend to point to lagging year cash flow in an attempt to paint a very bleak picture during negotiation. The best advice for a buyer when talking to an owner, broker or consultant is to get a firm working definition of the cash flow to be used for analysis. For example, a station that has had a steady growth performance selling at 10-times cash flow five years ago may be also selling at 10-times cash flow today. Which cash flow is involved -- leading year, lagging year, operating cash flow, net after-tax cash flow?

Radio stations can, and often do, turnaround their losing situation if new management and program changes are made. Despite the maturity of the radio industry, many individual stations are immature properties with great potential for a turnaround. In the 1970s, buyers often dealt with existing cash flow or the cash flow that could be expected to be generated during the next 12 months. Now, it is not uncommon for a buyer to take a property at 10-times the cash flow anticipated in year two or year three. This is one reason prices of major market FMs have soared.

Many buyers look for a good technical facility with a variety of rating, program and management problems, and try to turn it around within two or three years. Outstanding technical facilities are not easy to find, however, especially in growth markets with a lack of competition and format variety. Sellers know this and use future cash flow as their leverage in negotiations. For example, a station may be grossing $500,000 and losing $250,000 and still be able to sell for 10-times losses, because of the turnaround potential. Those familiar with real estate, franchising, retailing and other businesses will recognize this situation where control of a specific property or asset is needed before effective management can be put in place to achieve the potential of the property.

The most accurate method of valuation is discount cash flow analysis, based on the time value of money. A station's value in a future year equals the accumulated discounted after-tax cash flow streams through the years, plus the value of the station in the year to be sold, discounted to the present value. Chapters XII through XIV discuss a discount cash flow analysis in detail.

Summary

- Financial analysis of a proposed station purchase focuses on the seller's balance sheet, income statement, station's history and potential of generating cash flow. Projected cash flow determines the ability of a station to service its debt.

- The values shown on a station's balance sheet are usually much less than the station's market value. Intangible assets, mostly the FCC license and goodwill, comprise the major share of a station's value.

- Larger market radio stations are capable of generating much more revenue than small market stations. However, in terms of operating profits, a successful small market station may out perform a marginal large market station.

- Cash flow is the most important financial measure of how well a station is doing. Cash flow is operating profit before interest, depreciation, amortization and income taxes. Unusual expenses and revenues should not be included in the analysis.

- The best method for comparing the values of different radio stations is to compare their price-to-cash flow multiples. Typically, stations sell at 7-12 multiples depending on the market and station characteristics.

- During negotiations, buyers prefer to talk about past year's cash flow multiples while sellers stress the projected first year's (leading year) cash flow multiples. Leading year multiples are commonly used because radio stations often experience improved cash flow performance under new ownership.

Chapter XI:
Negotiation: Tax Aspects and Agreements

Negotiating the purchase of a station can be a nerve-wracking experience for a buyer. In the negotiation process, innocence often turns into skepticism as comfortable concepts of programming, promotion, positioning and ratings are completely overshadowed by concerns of structuring "the deal" with covenants, prorations, tax liabilities and amortization. Studying the process, being prepared for the complications, and learning the language of negotiation usually pays off with a handshake and a final purchase price acceptable to all the parties.

Granted, negotiation is not an easy task for buyers or sellers. Human nature being what it is, everyone wants to compare his apple with the other fellow's orange! Sellers come to the table with prices based on future projected cash flow, while buyers show up with notions of past year's cash flow. In terms of multiples, sellers begin asking 12-times or more, and buyers start out at 8-times or less, leaving a lot of room for negotiation.

Financial appraisals by objective third parties can serve as excellent starting points and save wasted time and battered egos. In addition, appraisals help to suggest a structure for the transaction, and may assist in setting the framework for the final purchase agreements.

1986 Tax Reform Act

Two noteworthy changes from the 1986 legislation play key roles in the asset vs. stock issue. First, the elimination of a special rate on capital gains led to all income being taxed at the same rate. It is interesting to note that the 1986 legislation retained the concept of capital gains in order to facilitate any return to lower rates.

Since the passage of that legislation there have been suggestions to reinstate a lower rate on capital gains. In fact, in 1989 there was a strong push for lowering that rate. The coming year will see a revival of that effort that may, in the end, be successful.

The second change from the 1986 Act was the repeal of the General Utilities doctrine which might lead some sellers to be taxed twice upon the sale of the station, once at the corporate level and once at the personal level. Prior to that legislation, when a station(s) was sold and the corporation dissolved, only the shareholders had to pay taxes on the proceeds at the personal level. Now, under certain circumstances, those gains generated by a station sale may be taxed both at the corporate level (prior to its dissolution) and at the personal level of the shareholders.

Stock Sales and Asset Sales

There are two general ways to structure the sale of a broadcast station -- a "stock" sale or an "asset" sale. Both have important tax implications for the buyer and the seller. Moreover, these implications have changed with the passage of the 1986 Tax Reform Act, and may continue to change with potential further changes in the Tax Code.

A stock sale is simply the sale of the corporation's stock to a seller. By selling stock, the seller escapes any tax liability for paying back the income tax saved on the depreciation deductions that it took during the years of ownership of the broadcast station. In addition, the seller is free of legal responsibility for collapsing the corporation and for the corporation's actual and potential liabilities. The seller is also only taxed at the personal level if the corporation is intact after the sale of the station. As a result, sellers usually prefer this type of deal.

The buyer in a stock sale assumes all of the assets and all of the liabilities of the corporation, including the tax liability for the past deductions by the seller for depreciation of the assets. This is known as "depreciation recapture," and will be discussed below.

In an asset sale, the seller transfers only the actual assets of the station to the buyer. The seller is, however, taxed at the corporate level for the proceeds of the sale, and at the personal level for the station sale proceeds distributed to the shareholders. Obviously, sellers try to stay away from asset sales whenever possible.

Buyers generally prefer to buy assets in order to recapitalize the asset values and take advantage of higher tax deductions for depreciation and amortization in the future. In that situation, sellers have to pay income tax on any depreciation which is recaptured in the sale. Likewise, an asset sale will spare the buyer the potential expense of collapsing the corporation and any undisclosed liability that might arise from the seller's corporation. Certain assets and liabilities, such as cash, receivables, prepaid expenses, payables and debt, are typically retained by the seller in an asset sale. In a stock sale, all assets and all liabilities are conveyed to the buyer.

So, the seller prefers a stock deal, the buyer an asset deal. The two choices have severe tax implications for both parties and will affect the price offered by the buyer and the price the seller would be willing to take. Through careful financial planning and negotiation, a final price for the station will emerge under either case.

Minority Tax Certificates

Another impact from the 1986 Tax Reform Act, in addition to its elimination of the special capital gains tax rate, was the increased use of minority tax certificates. In 1978, the FCC began to issue tax certificates which defer tax liability either when a station is sold to a minority or when "seed" money is invested in minority broadcast operations. In the first case, the capital gains on the sale have to be reinvested in a qualified replacement property (interest in a communications property such as broadcast stations, cellular telephone, etc.) or in some instances, stock of a corporation primarily engaged in the broadcast industry. The use of minority tax certificates could lead to a significantly lower tax liability for owners who were going to be taxed on both the corporate and personal levels (due to the repeal of the General Utilities doctrine).

There are a number of regulations concerning the ownership and voting control of the minority corporation buying the stations. If you are selling to such a corporation, you need to be very careful that the buyer meets those regulations. Purchase of your station by a minority corporation can, however, drastically reduce the immediate tax liabilities if you sell. Clearly, more station owners are taking advantage of tax certificates, as witnessed by the 31 certificates issued by the FCC during 1988, almost twice the number issued in any previous year.[1]

Finally, tax certificates can also be used in a transaction whereby a seller is breaking up a grandfathered local radio/television combination or a broadcasting/newspaper combination.

Allocation of the Price to the Assets

After-tax cash flow projections will depend on the way in which the purchase price is allocated to the various tangible and intangible assets of the station.

The tangible assets typically include: 1) real estate, such as land, land improvements, studio buildings and improvements, the transmitter site and the service buildings; 2) technical equipment, such as the antenna and tower, the transmitter and the air-chain equipment, studio, production and newsroom equipment and replacement part inventory; and 3) miscellaneous assets, such as furniture, vehicles, office supplies, etc.

The intangible assets generally consist of: 1) the FCC license; 2) the network affiliation contract; 3) national, regional and spot advertising contracts; 4) employee and management contracts; 5) various leasehold improvements; and 6) the going concern value of the business operation. An additional intangible asset may also be a "Covenant Not to Compete" (discussed later) between the buyer and the seller.

If, in the future, there is a return to a lower rate for capital gains, the allocation of the purchase price could create a conflict between the buyer and seller. The buyer wants to allocate most of the price to depreciable items and take advantage of higher future deductions. The seller wants to allocate the major share to intangible non-depreciable items, such as going concern, and reduce the tax liability to the lower rate for capital gains rather than the higher rate for ordinary income, which is paid on depreciation recapture.

Agreement by the buyer and seller on the actual allocation is not necessary but is highly recommended. The Internal Revenue Service (IRS) recently issued a new form, IRS Form 8594 "Asset Acquisition Statement", which requires the reporting of purchase price allocations for asset purchases. While the form's primary purpose is a reporting device with information that the IRS already has access to, differing allocations (between the buyer and seller) may lead to an audit.

There are numerous valuable intangible assets which may be amortized to reduce the owner's tax liability. These might include (depending on how they are used in the broadcasting operation) management contracts, talent contracts, certain "wasting", or finite assets, favorable loan agreements and favorable lease agreements. There is a great deal of case law precedent regarding the tax impact of intangible assets and FCC licenses. The reader is advised to consult with an expert on broadcast tax law for the most recent information on deductions for intangible assets.

Another group of assets, non-operating assets, may also be included in a station's sale. Non-operating assets include bonds, stock in other companies, investments such as real estate, and any other asset not connected with the operation of a station.

The ratio of intangible to tangible assets ranges from 1-3 to 3-1, depending on the transaction involved. In larger market transactions, the tangible assets comprise a much smaller percentage of the station's value, with the intangible assets comprising the majority share of the station's value. In smaller markets, it is just the opposite, with the tangibles accounting for the major share of the assets. In either case, the station's value will also depend on the disposition of the non-operating assets.

Finally, the IRS has numerous guidelines for contemporaneous appraisals of market value of assets, and buyers should consult with a qualified tax expert on these matters. Basically, the IRS guidelines require an allocation of the purchase price to the assets based on comparable sales of certain assets and on replacement cost of most tangible assets. The remaining portion of the purchase price may be allocated to the "residual assets" -- the FCC license, going concern value, and other unidentified intangible assets. At the present time, it is uncertain whether the intangible assets of the FCC license and any network affiliation contracts can be amortized. This issue is now being considered in the Tax court. It should be noted that there is no guarantee that the IRS will accept any particular allocation agreement between the parties.

Depreciation Recapture

This concept is very important for the buyer to understand, for it will affect the tax liabilities if the station is ever sold. It is also important if there is a return to lower rates for capital gains. Remember, depreciation deductions reduce an owner's basis in assets. For example, if one buys assets for $10 million, and takes $4 million in depreciation deductions over four years, the remaining basis in the assets will be $6 million. If one then sells the assets for $15 million, the gain is $9 million -- $15 million minus $6 million. It is not $5 million, based on $15 million minus the original $10 million cost, because the assets have depreciated by $4 million. The original owner has already taken advantage of depreciation deductions. However, the property probably did not really decline in value by exactly $4 million. In fact, the value may well have increased over time. As a result, the $4 million in depreciation deductions will not be included as part of the $9 million capital gain. That $4 million is, in effect, restored to income after having been deducted in prior years.

If there were no concept of depreciation recapture, the entire $9 million -- including the $4 million of ordinary income -- would be reportable as a capital gain and taxable at rates now at the ordinary income rate, but may be lower in the future. With depreciation recapture, however, the $4 million in depreciation deductions taken earlier is income that will always be taxable at the rate of ordinary income. If there was a difference in rates today the higher tax for the $4 million would represent a large gain of tax revenue to the IRS.

The extent to which recapture operates depends upon a number of factors including the value of the property on the sale date, the date that an asset was placed in service, the nature of its use (real or personal property), and whether the taxpayer has taken advantage of certain tax benefits available to the asset used in prior years. Recapture is usually substantial where an owner disposes of property held for any appreciable length of time. The seller has to pay the additional tax, but who bears the burden of the tax cost is a matter resolved during negotiation of purchase.

Covenants Not to Compete

It is common in radio station negotiations to include some type of special covenant whereby the seller promises not to compete with the buyer in radio in the station's market for a period of years. The use of non-compete agreements or consulting arrangements tends to distort the station's true market value because they only serve as a bridge in the "tax gap" between buyers and sellers.

The use of non-compete covenants has increased in the past few years due in part, to the 1986 Tax Reform Act. Prior to that legislation, sellers were reluctant to allocate a large amount of the station's sales price to these covenants since proceeds from this part of the deal

were taxed at ordinary income rates which were higher than capital gains rates. Under present conditions, with those rates being identical, sellers are more willing to allocate a larger amount to these covenants. Buyers have always wanted large values allocated to covenants. If a lower capital gains rate were to be reimposed, sellers would once again be reluctant to allocate much to these covenants.

A non-compete covenant is a deductible operating expense to the buyer and carries no interest. Thus, it is used as an interest-free loan by the seller to the buyer. The same holds true for consulting agreements with the seller. Often a combination of the two agreements is used to provide the seller with the gross dollars demanded in the purchase, but on the buyer's terms. Sellers sometimes want high values on the non-competes if they need the income to use against tax losses.

Typically, the agreement's period ranges from 5-7 years, with payout terms ranging from 2-4 years, and a value ranging from 15-30% of the purchase price. These norms can be exceeded at either extreme.

Non-compete agreements must be structured as a separate agreement apart from the goodwill, or the buyer will not enjoy the tax benefit. In addition, any amounts allocated to the non-compete agreements must reflect economic reality. The IRS examines a number of qualitative factors to determine whether the seller would be likely to compete after the sale of the station. They also examine a number of quantitative factors to assess the impact if the seller was to compete. The IRS has been known to disallow agreements that were priced too high, or non-compete payments given to an aging widow with no broadcast experience.

Recapitalization of Purchased Assets

Table XI-1 shows a typical recapitalization of assets schedule for a newly acquired station. The cost ascribed to most of the assets is the price that the buyer would have to pay to have new assets in place. The cost for the real estate, technical equipment and other equipment equals the asset value on the books as shown on the balance sheet from the year of sale. Additional improvements and acquisitions by the buyer are also reflected in the recapitalization schedule.

The appraisal values should not be confused with the values shown on prior financial statements. Note that the real estate and the improvements result in higher appraisal values than their actual costs, because real estate tends to increase in value over time. The estimated lives are also longer than the expected life of equipment, resulting in lower depreciation expenses. The tower has a long life, and therefore, a low depreciation rate. The short life of the other equipment allows a high depreciation rate. The real estate increased in market value, while the technical and other equipment was worth less than its original cost. Note that the estimated depreciation values were calculated on a straight line basis. A tax accountant

Table XI-1
Recapitalization of Fixed Assets ($000)

Asset	Cost (Book)	Depreciation Recapture	Market Appraised New Value	Life	Estimated New Dep./Year
Real Estate					
Land	$157	$0	$460	-	$0.00
Land Improvements	$86	$48	$215	15	$14.33
Service Buildings	$98	$32	$240	31.5	$7.62
Building Improve.	$29	$10	$85	31.5	$2.70
Total	$370	$90	$1,000	-	$24.65
Technical Equipment					
Tower	$60	$20	$130	15	$8.67
Antenna	$28	$0	$70	6	$11.67
Transmitter	$40	$35	$60	6	$10.00
Studio	$54	$41	$90	6	$15.00
Microwave links	$13	$9	$24	6	$4.00
Total	$195	$105	$374	-	$49.34
Other Equipment					
Furn. & Fixtures	$52	$35	$25	7	$3.57
Air Conditioning	$2	$2	$2	5	$0.40
Autos	$27	$19	$8	4	$2.00
Miscellaneous	$29	$9	$24	6	$4.00
Total	$110	$65	$59	-	$9.97
TOTAL FIXED ASSETS	$675	$260	$1,433	-	$83.96

may suggest a more aggressive method.

The cost of the assets to the seller was $675,000, and during their use, the assets depreciated in value by $260,000, leaving a net book value of only $415,000. The seller is responsible for repaying tax on the recapture of the depreciation taken in prior years up to the fair market value of each asset, or a maximum amount of $260,000. This will be taxable at ordinary income tax rates. The buyer could assume some of the $88,400 tax liability (the 34% tax rate on $260,000). That would be determined during negotiations with the seller and would depend on whether the buyer could apply the tax liability to current tax losses from other operations not associated with this broadcast station. However, the buyer can only apply the tax liability in a stock purchase.

As demonstrated, depreciation has an important impact on the after-tax earnings available for debt repayment or retained earnings. Upon acquisition of the station, the buyer "steps up the basis of the assets" by having them appraised at their "fair market value." The appraised market value becomes the new book value basis of the assets and determines the depreciation deductions that the buyer will take. Buyers can include in this fair market value substantial allowances for installation expenses under what is known as "turnkey valuation" of the fixed asset package -- the additional value of a put-together plant in good all-round working shape. The value can approximate all the costs for a turnkey contractor's construction, interest, contingency charges, overhead, profit and guarantee costs.

Recapitalization of the assets has an impact on the perceived value of publicly held corporations. Until a broadcast holding is sold by the corporation, the assets may be reported on the books at far below their market value. To the casual stockholders, the broadcast station operating revenues may not appear to be producing a very good return on the investment. Upon sale, the return can be substantial, especially if the corporation allocates a major portion of the purchase price to the intangible assets which, even if already amortized, are not subject to recapture. Before broadcast stocks began their meteoric rise in 1984, the break-up value of broadcast companies was indeed far greater than their book value as reported on financial statements.

Impact of Intangibles on Allocation

Intangible assets are generally amortized over their useful lives on a schedule which normally does not exceed 40 years. The basic difference between amortization and depreciation is that the deductions are constant for amortization with no acceleration allowed as with depreciation. The most important intangible asset, the FCC license, may carry a historical book value well below its market value.

It is uncertain whether broadcasters may amortize the cost of the license and deduct the costs from their pre-tax earnings. A number of companies have asked the IRS to rule that

the FCC license and network affiliation contracts may be amortized under IRS section 1253(d)(2), which applies to all franchises. Although the IRS has not issued any rulings, there are pending court cases, brought by broadcasters, to present the question to the courts.

Confusing the issue for publicly held companies, the Security and Exchange Commission (SEC) insists that such amortization serve as a deduction from financial statement earnings. Yet, the IRS holds that broadcast licenses are of "indeterminable life" and are generally not amortizable because the value of the assets cannot be appraised on a stand-alone basis. Other intangible assets that generally are not amortizable in the IRS's view include network affiliation contracts and local and national spot advertising contracts. On the other hand, some advertising contracts can be amortized, if they meet all of the following conditions: (1) they were executed at time of closing; (2) are contracts for future airing; and (3) they do not stand much chance of renewal.

Non-economic factors may also influence the market value of broadcast stations. A special desire by a buyer to own a station in a particular market, or pressure to sell, may lead to transactions that cannot be rationalized by sound investment criteria. These should be excluded from comparable sale benchmarks used to arrive at fair market value appraisals.

The Purchase Agreement

There is no such thing as a standard station sales contract. Agreements range from simple ten-page contracts for an all cash purchase of a small station, to a detailed 200-page agreement with numerous appendices covering complex purchases of group broadcast properties. The contract not only sets out each party's rights, but also the procedures for the final closing. Precisely ironing out all the purchase aspects ahead of time will help to minimize the frequent last minute crises at the closing.

The typical issues to be addressed in the purchase agreements include:

TYPE OF SALE: In most cases the seller wants a stock sale and the buyer wants an asset sale. With the revisions in the tax law, the final outcome will significantly affect the tax liabilities of the two parties.

PAYMENT TERMS: Generally, seller financing will result in a higher purchase price than one negotiated for a cash sale. In a deferred payment purchase, current and future rates also must be considered. An increase in interest rates means a reduction in the present value of the station to the buyer because of the higher interest cost. From the seller's standpoint, the deferred payments are worth less over time. Thus, if a seller offers terms at below market interest rates, the buyer should assume that the seller has taken that additional risk and premium into account in agreeing to a price. Balloon payments, interest free years, split interest rates, serialized notes, and long amortization schedules are common aspects of station

transactions. As mentioned, the more favorable terms the buyer receives, the higher the price to be paid for the station.

ALLOCATION OF THE PURCHASE PRICE: The final allocation will usually be based on the tax objectives of the buyer and seller. Buyers want to allocate as much to the tangible assets as possible and take advantage of accelerated cost recovery deductions. Sellers want the price allocated to as much of the intangible assets as possible to avoid depreciation recapture. Of course, so long as ordinary income and capital gains tax rates remain the same, this tension between buyer and seller is reduced. This may prove to be a tougher area of negotiation than deferred payment terms. Remember that with the new IRS form, allocations reported by both the buyer and seller will be more closely scrutinized for conformity.

OBLIGATION OF THE SELLER TO PRESERVE THE OPERATION: The seller must pledge to operate the station in the normal course of business. However, most sellers attempt to keep costs as low as possible once they have decided to sell, or are awaiting FCC approval. Often, equipment maintenance and scheduled salary raises and promotions suffer during this difficult time. There may be an unwritten understanding between the buyer and seller to fire the higher priced talent, especially if the buyer plans a major format change. The seller must take care not to make any moves that would result in "material adverse change" of the station, such as letting network affiliation contracts expire or failing to maintain a general level of promotion.

Incentives for good seller operation are sometimes set up to protect the going concern value of the station during the waiting period for final closing. For example, the final purchase price could be adjusted at closing, based on any change in station ratings and revenue position during the waiting period. If the station has improved under the seller's control, the price could be raised, and if the station has undergone any decline, the price would be lowered.

PAYABLES: The buyer and seller usually prorate the value of all contracts to be divided between each party based on the anticipated closing date. A schedule of prorated costs is usually attached to the purchase agreement. A seller might also advise a buyer if there is an opportunity to purchase a service important to the station's overall value, such as a marketing service or special program package. The seller would take the buyer's reaction into account in deciding whether to buy or pass on the opportunity. Again, a proration method would be used to split the cost.

RECEIVABLES: Terms are usually arranged for the buyer to collect the outstanding advertising accounts and split the receivables with the seller. Typical terms would be for the buyer to pay the seller 50% of all net collections (after deducting commission expenses) for 90 days after the closing. After that, all collections would belong to the new owner. Sometimes the receivables are simply assigned to the buyer and the purchase price is adjusted to reflect that situation.

WARRANTIES: The kind of warranties that the equipment will carry is usually defined in the purchase agreement. Usually, the parties agree on language that calls for the equipment to be in satisfactory working condition and meet FCC standards.

LIABILITIES: The rights of the buyer and seller are defined in the event of damage to the facilities prior to closing. Buyers generally seek the right to choose between terminating the agreement when damage cannot be repaired prior to closing, and accepting the facility "as is" together with an assignment of the insurance proceeds. Sellers also seek to assure that buyers will fulfill their closing obligations. One common practice is to require the buyer to pay 10% of the purchase price into an interest bearing escrow account to be paid to the seller as liquidated damages in the event of the buyer's default. Upon closing, the interest could be split between the seller and the buyer, but usually all the interest is paid to the buyer.

SPECIAL PERKS: The seller may want the buyer to continue paying for the seller's leased automobile, or provide free office space, or provide free use of barter agreements with local restaurants. One seller wrote terms into the purchase agreement that called for the buyer to provide access every night to the seller's son for use of the production studio to work on his demo tape for a recording contract as a pop singer. (The son had questionable talent, but the station lived up to the agreement. Eventually, it had to build another production studio because the station could not work around the would-be superstar and still get commercials on the air!)

Generally, the FCC will not allow the buyer to participate in the management of the station until after the FCC approved sale has been completed. The FCC may set aside its approval up to 40 days after the grant. Most contracts also provide that the closing may take place only after FCC final and non-appealable approval.

Summary

- Radio station transactions involve either a sale of station assets or a sale of the company's stock.
- The stock value of publicly held broadcast companies may be undervalued compared to the value of the assets represented.
- Minority tax certificates can lower or defer taxes for the seller upon the sale of the station.
- Buyers and sellers negotiate the allocation of the purchase price to the assets. Buyers want most of the price allocated to the depreciable tangible assets while sellers want most of the price allocated to the intangible assets.

- Sellers are liable for depreciation recapture at the time of sale. Buyers "write up" their cost of the tangible assets to their current market value and use depreciation expenses as deductions in calculating taxable income.

- Asset appraisals by outside parties help to set the framework for negotiations on the allocation of the purchase price.

- Covenants not to compete and consultancy agreements are used as a bridge between the buyer's offer and the seller's asking price.

- Purchase agreements detail all the aspects of a transaction and the rights and obligations of both parties. Typically, purchase agreements address payment terms, allocation of price, proration of prepaid expenses and proration of receivables and the special arrangements between the parties.

Chapter XII:
The Station Pricing Model

Chapters I through XI highlighted the financial and market variables for buyers to consider when evaluating radio station deals. Chapters XII through XV discuss a pricing model which the buyer can use to arrive at the fair market value of a proposed station purchase.

The effectiveness of this model depends on using a realistic set of expectations as the basis for forecasting growth and projecting revenues and expenses. The model can be a very valuable tool only if valid input is used. Otherwise, it may produce only an impressive set of estimates that misleads the buyer and results in a disappointing investment outcome. As the old saying goes, "garbage in, garbage out."

The following is a suggested design for a station pricing model based on two general valuation techniques: present value analysis and comparable sales of similar broadcast stations in similar markets. While most financial models include present value analysis and comparable sales for evaluating proposed station acquisition and performance, the model to be discussed here is designed especially for buyers focusing on the after-tax impacts of station acquisition. Other variations of the model may be better suited for investment consultants, lenders, station brokers and sellers more concerned with the pre-tax aspects of station transactions.

The present value analysis is based on the time value of money and the assumption that a dollar earned today is more valuable than a dollar earned tomorrow. Often called "discount analysis," this approach values the worth of a future earned dollar in terms of the present value. For example, using a 10% discount factor, the present value of a dollar earned one year from now is only 91-cents today, a dollar earned two years from now is worth only 83-cents.

In this analysis, the station's annual streams of income are discounted to their present value. Likewise, future revenue derived from resale of the station is adjusted for tax liabilities and then discounted to present value.

The comparable sales analysis should be used in reference to the results of the present value analysis. Major non-economic factors, such as a buyer's desire to own stations in particular markets, distress sales, etc., influence broadcast station prices and cannot be reconciled with sound investment criteria. These and other non-economic factors are excluded from the proposed pricing model.

Financial ratios for return on invested capital, return on sales, debt-to-equity, debt-to-cash flow, and management policy on receivables and dividends may serve as guidelines for

constructing the model. These become important for analyzing the results of the model and for reviewing the buyer's assumptions and goals for operations, financing and debt service. Financial ratios are especially important after the acquisitions as benchmarks for performance. It is beyond the scope of this book to discuss all the variables involved in establishing the financial ratios used by investors and lenders.

The Present Value Analysis

A broadcast station's value is a function of the present value of the station's after-tax cash flow streams plus the present value of the estimated revenue from future resale of the station. Numerous factors impact this analysis, including this buyer's goals, acquisition strategy, tax structure, the amount and type of debt capital needed, and the future resale value of the station. The resale value must also be adjusted for any estimated future tax liability to the seller (the current buyer) due to capital gains and depreciation recapture.

There are eight steps in the present value analysis:

1) **Determine the Investment Payback Period:** The payback period, by definition, is the number of years over which the investment outlay will be recovered or paid back from the net after-tax income streams. The investor must also consider the number of years it will take to pay off any debt incurred in financing the station purchase. Thus, the buyer should be concerned with two payback horizons: investment payback and debt repayment.

The amount and terms of debt financing will affect the investment payback period, and, therefore, should be the biggest concerns in estimating a payback period. In addition, both payback horizons will depend on the amount of risk involved in the investment. Generally, the risk will depend on the actual station and its market. The perceived risk must be weighed against the investor's required rate of return to determine a realistic investment payback period.

The payback periods will also vary depending upon the type of station involved. This difference is reflected in the scale of capital needed for each acquisition and the local competitive market factors. For example a daytime AM station licensed to a large market is usually considered a higher risk venture than a Class C FM licensed to the same market. While it may take longer for the daytimer to break even on the investment, a lender or investor may want a shorter payback period to offset their risk. On the other hand, with the Class C FM, the investor may feel more comfortable with a longer payback period because the risk, compared to the daytimer, is less. A buyer may also enter into a deal with a short payback period in mind. For example, in a turnaround situation, the goal is usually rapid improvement of the station's performance, and resale within three or four years to achieve a large capital gain.

2) **Estimate Future Market Radio Revenues:** The potential rate of revenue growth is affected by such factors as the historic broadcast revenue growth pattern, the growth of retail sales, and the general economic and demographic condition of the market. Additional factors include the likelihood of new stations entering the marketplace, the current and projected market position of the competition in ratings and revenues, and the technical and coverage capabilities of the competition. Cable penetration and projected growth, and emerging communication technologies will also contribute to advertising revenue fractionalization within the market.

The resulting projections should be adjusted for cyclical factors. For example, if a major automaker has made a future commitment to build a plant in the market area, that event should have a very positive impact on retail sales and a ripple effect on media market revenues. Likewise, new housing developments and residential growth projections will impact the available audience share and revenues available for the market. On the down side, if the area's major sports team is expected to move from the service area, the market revenues will be negatively impacted. Cyclical impacts are varied and peculiar to specific markets. There are numerous available services that will selectively monitor the economic environment and evaluate the impact that cyclical changes will have on the media market's revenues.

3) **Estimate the Station's Share of Market Revenues:** A station's potential to maintain or improve its audience share is based on the quality of the technical facilities and coverage, programming, promotion, competition and management. Additional factors to consider include the station's target demographic audience, projected demographic growth and changes, and seasonal changes in the market. The evaluation should compare the station's past revenue and ratings shares of the market with that of its major competition. It should also project the growth potential of the station's format based on its appeal to audience segments.

Other variables that will also influence a station's share of the market revenues include the quality of management, sales and programming. These factors are largely unquantifiable, and therefore, difficult to include in model design. During the evaluation, these factors should be used to adjust revenue estimates, but generally, these factors will cancel out among the various stations in the market over a period of years. Again, weighing the significance of these factors is a very subjective consideration. For example, if a large group owner enters a major market, the quality of management probably will not differ from the quality of management of competing stations. However, if the same group owner enters a small non-competitive market, that event will probably affect the revenue leadership patterns of the market. Or, consider the effect of a station that switches to Urban programming in a market with large Black and Hispanic demographics. If the station is aggressive and the format competition is minimal, that Urban station could quickly outperform other stations for listeners and revenue.

4) **Project Operating Profit-Loss for the Station:** Revenue projections are usually derived from the station's historical share of market revenues. Future revenues may also be influenced by station and/or market changes. For example, if the station is planning to

upgrade its facilities and coverage capability, future revenues should reflect these improvements. If the station's major competition is expected (for whatever reason) to change format, the station being considered for acquisition may find itself in the enviable position of being the only "whatever-type-format" station in the market. Its ratings and revenues could dramatically improve in a short time (even though by default!). The radio marketplace can be volatile in areas with a high level of station sales because windows of opportunity are often created for stations to improve their position. Station manager's try to take advantage of such market changes to improve their station's position.

Expense projections should be based on the station's past level of expenses and should be adjusted for any unusual expenses (such as the seller's personal expenses), reasonable future expense growth based on anticipated changes in the general economy, and the cost of programming, staffing and positioning. For example, during the 1970s, transmission and data line charges became one of the fastest rising expenses broadcasters incurred. Well managed stations planned for these increased landline rates and invested in microwave equipment to eliminate the landline charges. The transition period was, however, very expensive as stations ran a dual system of microwave and landline transmissions. At the same time, the radio industry began to invest in more computer technology for programming, billing and administration. Again, operation of a dual system during this transition period resulted in large expense increases. Other examples of anticipated expense increases include the industry trend toward more rating periods during the year, additional market and audience research, and the use of more outside consultants for programming and sales.

Other sources of revenue and expense, relating to station operations, should be included in this analysis of profit and loss. Studio production, special event promotions, syndication ventures and subcarrier services may constitute profit centers that attract additional clients from the business community. For example, some stations have invested in state-of-the-art multitrack studios and creative services staff to produce sophisticated commercial jingles and soundtracks. Other stations have become involved in joint ventures with concert and special event promoters, whereby the station shares the risk and the profits from these events. Many large market stations have developed successful feature programs that are syndicated and nationally distributed. These profit center operations create a synergy for the station's mainstream operations that enhance the station's performance in positioning, promotion, ratings and revenue.

Finally, the evaluation should also include a comparison of the station's historic profit margins with those of other similar stations, both within the market and in other similar markets. The latest *NAB/BFM Radio Financial Report* is an excellent yardstick for comparing revenues, expenses and pre-tax profit margins.

5) **Estimate the Capital Requirement**: As technology rapidly advances, radio stations are discovering that facilities are often outdated (and perhaps even obsolete) compared to the technology available and to what their competition is already using. There are many technical

improvements being introduced at what seems like the speed of light. The station's technical staff may want to often replace everything, which is usually cost prohibitive. At the other end of the extreme, management may want to take only a "band-aid" approach to equipment and facilities maintenance and replacement. Neither approach would be considered a wise strategy in a competitive environment. While there are no rules for capital budgeting, it is generally wise not to invest in unproven technology, no matter how new and sophisticated. Piecemeal replacement can also create problems because radio station hardware often works best as part of a system for the studio, production and air chain. In the December issue of *Broadcast Engineering* magazine, the results of a survey of chief engineers on their capital budgets in the forthcoming year are reported. This report is a reference to use in determining your station's capital budget.

There are numerous options for capital budgeting. Equipment lease packages are an increasingly attractive option for capital replacement. Budgeting should focus on the tax and cash flow considerations for "lease-or-buy" decisions, and there are computer software products available to help evaluate these options. NAB conventions offer a great opportunity to realistically evaluate hardware benefits and costs by seeing hardware demonstrations and through comparing notes with other broadcasters experienced in equipment replacement.

Capital requirements will also affect the estimated long term depreciation costs and the level of recapitalization of the assets after acquisition of the station. Depreciation estimates should be developed by examining historical depreciation charges for the station and comparable stations. Estimates must also be made for investment in new buildings and leasehold improvements. Wise investors use qualified appraisers and technical consultants in determining the value of station facilities and in establishing realistic replacement schedules. On-sight inspection and appraisal is very important to the prospective station owner before the deal is finalized.

6) **Calculate Future Net Cash Flow**: The station's annual after-tax cash flow should be computed by adjusting operating income for interest, depreciation and amortization expenses, local, state and federal income taxes, adding back any non-cash adjustments such as depreciation, and subtracting any capital expenditures. Tax loss carryforwards should also be included in the future cash flow projections. Finally, unusual revenue inflows, such as earnings from the resale of used equipment, must be figured into the analysis. These should be credited to the pre-tax profits, rather than the net revenues, in order to accurately project the station's growth in operating cash flow and profits.

"What if" analysis is an important aspect of the future cash flow projection. Because the level of after-tax cash flow will determine the funds available for repayment of debt principal, the debt commitment and repayment schedule must be balanced against the impact of debt interest on the after-tax cash flow. Interest is a deductible expense and will fluctuate with the terms of the loan and the level of outstanding debt. Thus, the way the debt is structured will have a crucial impact on the after-tax cash flows during the early years of

ownership. If the debt commitment is too high, a string of negative after-tax cash flows may result and limit the station's growth potential. A well planned financial model should help to highlight these pitfalls before the buyer commits to an ill-advised investment.

7) **Calculate Present Value Cash Flow**: This step is based on the time value of money and a realistic present value rate must be used for the computation. The present value is influenced by a variety of factors, including the degree of industry risk and business risk for the type of station involved, prospective rates of return for alternative investment opportunities, historic rates of return earned by comparable properties, and investment attitudes about future interest rates. The rate is tied to general financial factors such as the inflation rate, the prevailing yield on long-term treasury securities ("T-Bonds"), and yields on mortgage loans or corporate bonds.

During the 1980s, the discount rate generally ranged from a high of 18% to a low of 10%. Aside from the economic and situational factors listed above, the discount rate may depend on when it is applied. By the beginning of 1989, interest rates had begun to rise from their 1986 low levels and inflation had edged up. Whatever rate is used, it should be consistent throughout the analysis.

As stated above, a present value factor will be applied based on the appropriate discount rate and the principle of risk vs. return -- e.g., the higher the risk, the higher the return on the investment. Thus, an investor must weigh what yields are available on alternative investments and estimate the relative risk of all opportunities before arriving at an appropriate present value factor to apply in the pricing model.

8) **Determine the Station's Future Resale Value**: The resale value can be estimated by applying multiples to future operating income and net revenues. The multiples should reflect current industry conditions of cash flow and net revenue performance for comparable stations. For example, AM stations tend to reflect mature performance with their cash flow multiples generally ranging from 4-6. In contrast, FM stations tend to reflect growth potential, with cash flow multiples ranging from 8-10.

Often the results will vary depending on the methodology used (revenue multiples vs. cash flow multiples) and an average should be applied to the differing outcomes to arrive at the resale estimate.

The resale figure also must be adjusted for capital gains and depreciation recapture tax liability, and the inherent risk of valuing the station so far into the future. The estimated resale value should be discounted to present value, and added to the present value of total future cash flow streams. The sum represents the current value of the broadcast station as derived by application of the present value analysis.

Present value analysis greatly depends on hypothetical data and assumptions that are prone to large variances. Therefore, a variety of performance scenarios should be developed, and their results averaged, to reduce the risk inherent in these types of projections. The averaged results should then be compared with the results of comparable sales analysis and, if need be, adjusted to arrive at the final estimate of station value.

Comparable Sales Analysis

The most important criteria for comparable sales are comparable market size and projected radio revenue. Care must be taken not to compare "apples to oranges." For example, avoid comparing daytime AMs with Class C FMs; stations owning considerable real estate and facilities with stations that lease all of their facilities and operating space; technically flawed stations with technically superior stations; suburban stations with large market metro stations, etc. The analysis will be more accurate if it includes recent sales of similar stations within the same market. If less than ten sales figures are used in any one category, a median rather than an average of the sales should be used to eliminate distortion from extreme situations. As previously suggested, the results of the present value analysis may be adjusted to conform with the value arrived at through the comparable sales analysis.

Purchase, Management and Financial Controls

The pricing model helps the prospective buyer to predict the station's potential for generating net income and servicing the debt. Unfortunately, too many station buyers (and sellers who finance transactions) discover the hard way that it is easier to justify a bank loan than it is to run a profitable station.

The following are a few guidelines that should help in projecting station performance. These are simply planning standards and are not absolutes in themselves. Again, every transaction is unique and may involve aspects that fit the buyer's needs better than the guidelines do.

NAB/BFM Financial Yardsticks: The annual *NAB/BFM Radio Financial Report* has information on station revenues, expenses and pre-tax profit margins grouped by market size, station revenue size, station type and format. The results are reported by mean, median and quartiles in order to evaluate each category in terms of its most relevant application. For example, promotion costs tend to vary widely among stations while network revenue is rather predictable. Therefore, when comparing stations to NAB/BFM data, the median estimate may tend to be more accurate for promotion costs while the mean would be more reliable for network revenues.

Financial Ratios: These will vary depending on the particular needs of the buyer, the type of acquisition and the manner in which the debt service and financing are structured. Deal participants evaluate the significance of financial ratios very differently. Lenders are generally concerned with the risk and coverage of the debt service, while investors are concerned with equity growth. Buyers and managers must monitor all the financial ratios to design an acquisition strategy, select the best capital structure, evaluate performance and implement operation controls. In addition, a working knowledge of financial and management ratios will help the proposed owner speak the same language as potential lenders and investors. The reader may also check with financial rating services, such as Dun & Bradstreet or Robert Morris Associates, to ascertain industry ranges on ratio categories. These are the same sources that lenders use to evaluate investment and loan proposals.

The most important ratios include:

Loan to Cash Flow: This will suggest the amount of debt capital that a lender is willing to provide, based on the anticipated cash flow performance of the borrower and the deal. In general, senior lenders will cover an average of 4-6 times station cash flow.

Interest to Cash Flow: Lenders are concerned with risk and coverage of debt service. Thus, in general, they want the annual cash flow to be at least twice the amount of scheduled interest payments.

Working Capital: Lenders focus on the operation performance and appreciate the station's need for adequate working capital, especially in the early years of acquisition. Generally, the lender will want the borrower to have 15% of the station purchase price available for working capital. For example, if the station costs $1 million, the lender will look at the borrower's business plan to see that it calls for $150,000 in working capital.

Age of Receivables: If receivables are involved in the acquisition, they will have an impact on the level of working capital needed. A lender who is providing a revolving credit line for working capital may use receivables as the collateral for the loan. The age of the receivables is important, because if a large percentage of receivables is over 60 days, the value of the receivables is usually discounted. Typically, lenders will want the receivables to show an average age of 30 days.

Quick Ratio: Sometimes called the "acid test," it indicates the current stability of the station's balance sheet. By definition, it is the ratio of current liquid assets -- such as cash and receivables -- to the current liabilities -- such as notes due within one year. The quick ratio is a handy way to evaluate the station's level of working capital. Thus, it is not unusual for lenders to require that the borrower's quick ratio never fall below 1.5 - 1.

Debt to Equity: In evaluating the capital structure of an acquisition, senior lenders are more flexible now compared to just a few years ago. Many highly leveraged deals begin with

a debt to equity ratio of 5 - 1 or more. In general, a senior lender will look favorably at a 3 - 1, or even 4 - 1 structure that is gradually drawn down to zero debt over the term of the loan. As discussed before, lenders are more concerned with the timing and performance of debt service rather than with the level of debt to equity.

Return on Investment (ROI): This is perhaps the single most important ratio for an investor to evaluate. By definition, ROI is the net after-tax income divided by the invested capital. ROI is evaluated annually over the term of the investment. Thus, ROI reflects the general performance of the station operations, and the capital gains upon resale of the station. In a growth situation, it is not unusual for a station's ROI to double within five years. Typically, the ROI might be only 2% during the first year of ownership, and continue to increase to 50% by the tenth year of ownership.

Return on Equity (ROE): This is the most important ratio for a stock holder to evaluate, especially in a leveraged acquisition, because ROE shows how equity can be built from debt over the term of a loan. By definition, ROE is the net after-tax income divided by the equity value shown on the balance sheet. If a station's cash flow is improving over the years, every dollar not consumed by debt service and taxes flows through to equity.

Effective Annual Return (EAR): This is another way to evaluate equity growth over the term of ownership. By definition, EAR is the original investment divided by the cumulative equity value at any given point of ownership. The percentage return tends to decrease over time because it reflects how equity value is leveraged out of debt (i.e., increases) during the early years of ownership. An EAR of 40% or more is not unusual during the first few years of ownership in a leveraged acquisition. The return is based on compounded annual growth and can only be figured by using a financial calculator or a computer software program with compounding features.

Venture equity investors have the highest expectations of EAR. Venture capital firms with an equity position generally require a compounded annual minimum of 30% or more EAR, including interest and capital gains.

Return on Capital (ROC): This ratio is a valuable tool for designing the capital structure of an acquisition and for evaluating the station's overall performance. By definition, ROC is the after-tax net income divided by the combination of share holder equity and outstanding debt. ROC is also a good indicator to use for anticipating working capital needs during cyclical performance, because it shows whether the station is undercapitalized during any period of its development.

Return on Sales (ROS): This indicator is of more importance to management than to investors. By definition, ROS is after-tax net income divided by NET revenues (not gross revenues). ROS indicates how well the station is competing for its revenue share of the market.

Typically, a successful station will achieve a ROS of 20% or more. A companion measure to ROS is the station's cash flow margin.

Cash Flow Margin: This is perhaps the most important management indicator, and one that lenders and investors will use to evaluate the station's operating history. By definition, cash flow margin is the station operating cash flow (before tax, debt service and amortization) divided by NET revenues. It is not unusual for successful radio stations to consistently achieve a cash flow margin of 40% or more.

Summary

- The pricing model is designed to determine the prospective radio station's fair market value and is based on: 1) the present value analysis; 2) sales of comparable stations; and 3) the financial and management objectives of the buyer.

- The present value analysis estimates the station's ability to generate after-tax cash flows over a period of years, and discounts those streams to the present value of the investment. The analysis focuses on: 1) the investment payback period; 2) the future market revenues; 3) the station's share of market revenues; 4) the station's future operating revenues, expenses and profits; 5) the estimated future capital requirements; 6) the future value of the cash flows adjusted for interest, taxes depreciation, amortization and capital expenditures; 7) the present value of the future cash flows adjusted by an appropriate discount rate; and 8) the resale value adjusted for taxes, risk of forecasting and present value.

- Various performance scenarios should be used in present value analysis in order to lessen the risk inherent in using estimates and assumptions about future values.

- Comparable sales analysis should be based on the median of similar station sales over a period of years. Generally, the more recent the sales data, the more accurate will be the comparable sales analysis.

- Financial guidelines should be used to select the most relevant data for use with the pricing model. The guidelines can be based on NAB/BFM financial yardsticks for comparable stations, and on financial goals for operational performance and debt service.

- Financial ratio analysis provides important tools for prospective owners to use in acquisition and management and helps them speak the same language as lenders and investors.

- The most important financial ratios to evaluate include Loan-to-Cash Flow, Earnings-to-Interest, Working Capital, Age of Receivables, Current Assets-to-Current Liabilities, Debt-to-Equity, Return-on-Investment, Return-on-Equity, Effective Annual Return, Return-on-Capital, Return-on-Sales, and Cash Flow Margin.

Chapter XIII:
The Station Offering

The following profile of a station for sale is based on real data and information found in broadcast magazines, annuals and research publications (discussed in Chapter VIII). Not all of the data presented in this chapter is essential for a simple determination of the station's fair market value. Professional broadcast consulting firms use much of these data to construct sophisticated statistical models for valuing the station. A layman can also arrive at a relatively accurate appraisal of the station's worth by selectively using the data presented below. Thus, this chapter (and the two following) set up an exercise whereby the reader will learn how to evaluate a barrage of market and station information, identify and select the most useful data, and use it to construct the pricing model (discussed in Chapter XII) for evaluating a station's fair market value.

For the purposes of this exercise, the station will be called WBPE and the market will be called "Midwest City." The real station and market are very similar to this hypothetical station and market profile in terms of ratings, revenues, market size and quality, demographics, economics, competition and growth characteristics.

All of the exhibits on the station, the competition and the market are placed at the end of the chapter (before the Chapter Summary). Typically, a station broker or seller would supply the prospective buyer with an executive summary or narrative about the station, the market and the deal, with all of the data exhibits and tables in a separate section -- similar to the layout of this chapter.

Market Profile

"Midwest City" is a cosmopolitan hub for commerce and transportation in the middle of the farm belt. "Midwest City" was selected for the exercise because it is small enough for many first time station buyers to afford the acquisition and operation, and large enough to clearly demonstrate the impact that ratings, revenues and competition have on station prices.

In 1989, Midwest City was ranked as the 27th most populated metropolitan market, with 1.46 million people, and 23rd in terms of estimated gross radio revenues, with $34.5 million. Retail sales in 1988 were estimated to be $9.6 billion, and gross radio revenues were estimated to be about 0.36% of retail sales, slightly above the estimated national average of 0.35%. Annual radio gross revenues are expected to grow at a compounded annual average of 8.9% from 1989 through 1998, slightly below the market's 9.1% growth rate from 1983

through 1988. However, radio managers rate Midwest City with a 3.6 current rating and a 3.8 future rating for quality, based on a 1 to 5 scale (1 = awful, 5 = excellent).

Tables XIII-1a through XIII-1c profile the market by municipality, radio coverage, demographics, rank factors, employment characteristics, type of industry, environmental factors, media ownership and media revenue estimates.

Table XIII-2 summarizes the market factors of population, retail sales, radio gross and net revenues, revenues as a percentage of retail sales, and revenue per capita from 1983 projected through 1998.

Station Profile

WBPE-FM went on the air in 1982, licensed to serve a small suburb of Midwest City. From the beginning, the station was plagued with a signal coverage problem. Programmed as a personality, middle-of-the-road music station, the station scored very low ratings and lost over $2 million in just 18 months. In 1983, the station was sold for $1.6 million to first-time station buyers. The new owners improved the coverage, promoted heavily, and programmed it as an Album Rock adult station. Ratings improved in mid-1984 to a 3.6 share of the radio audience, and then began a decline to 1.6 by early 1986. The owners considered building a new tower closer to the metro to make the signal competitive. They instead decided to cut their operating losses of $1.6 million, and sold the station for $2.35 million in late 1986. The current owners bought WBPE with major financial participation by venture capital firms.

The owners are experienced radio broadcasters who also own a successful FM and a marginal AM in the South. They made a moderate improvement in ratings and revenues and kept Album Rock as the format. They also moved forward on the new tower project, bought land, and secured approval from the FCC. By early 1989, however, WBPE was once again for sale. The reason given was that the owners want to retire the debt, improve the performance of their AM station, and concentrate on new acquisitions in larger markets in the South.

Table XIII-3 is the cover page of the station offering supplied by WBPE's broker.

The Competition Profile

Midwest City is a competitive radio market, dominated by an AM/FM/VHF group owner and five other AM/FM combinations owned by various group broadcasters. Out of 26 station signals entering the metro, 19 stations are rated by Arbitron. Of those 19, 17 have at least a 1.0 share (average of 1988 ratings) of the metro audience, based on Arbitron ratings for 12+, average quarter hour, Monday through Sunday, 6 a.m. to midnight. Every type of

popular radio format is represented in the market and, at the present time, no obvious programming hole's need to be filled.

In 1988, WBPE had an average audience share of 3.0 and was ranked 15th in ratings out of 19 stations. In 1989, WBPE maintained its 15th rank (based on only two ratings books, Winter and Spring), but its share average had dropped to an average of 2.8. It has been in a downward ratings trend since 1987.

WBPE was estimated to be 8th in the market in 1988 gross revenues, and outperformed its ratings by a ratio of 1.63 (revenue share divided by rating share). Most successful stations outperform ratings at a ratio of 1.1 or 1.2, although it is common for aggressive stations -- such as WBPE -- with low ratings to achieve high ratios of 1.5 or 1.6. The average ratio of the seven market leaders in 1988 was 1.17. During 1988, WBPE was estimated to have earned 4.9% of the gross market revenues while the number-one station, an AM powerhouse, was estimated to have earned 13.3%, with a revenue-to-ratings ratio of 1.26. The number-one billing FM was estimated to have earned almost 9.9% of the 1988 gross market revenues, with a revenue-to-ratings ratio of 1.3.

Table XIII-4 summarizes the rated stations in Midwest City and Table XIII-5 shows the rating trends for the stations. Table XIII-6 ranks the stations by 1988 gross revenues and summarizes their revenue-to-rating ratios.

The Deal

WBPE's owners listed the station with the same Washington, D.C. based broker that it used in 1986 to buy the station. The broker suggested using the same strategy to sell the station that was used in 1986 when the current owners acquired it -- namely to stress the potential of the station to correct its signal problems with a new tower project and turnaround its failing position in the market within three years. Because of the unstable ratings and revenue performance of the station, the seller is stressing the station's potential ability to generate cash flow and net earnings during future years.

In early 1989, WBPE's asking price is $4.2 million cash for the assets. A prospective buyer negotiated with the owners during late 1988 to purchase the station for $4.35 million, but the deal fell through when the prospective buyer could not secure all of the financing. The sellers refuse to finance anyone who is not a "deep-pocket" operator, and are very anxious to sell for cash. They have a few new interested buyers who have recently visited the station and are considering the purchase. Yet, as of June 1st, 1989 nobody has made a firm offer.

The owners have not put any money into the station since late 1988 (over six months) for promotion and capital improvements, and are spending only enough to keep the station on the air with a minimal staff. Their efforts are concentrated on advertising sales, and they are

aggressively offering short term packages of commercials at rates significantly below those of the competition.

The owners are also continuing to maintain the necessary applications and permits for the new tower project because they believe that a new tower site will be crucial to the future success of WBPE. They have been very candid with all prospective buyers about the need for signal improvement.

Table XIII-1a
Midwest City Market Profile

Population Centers			
County	Population	City	Population
Alpha	615,600	Midwest City	422,700
		Satellite City	115,500
Beta	169,000	Smallsville	156,700
Bedroom	292,500	Yuppie Park	83,900
		Newtown	45,200
		Affluence	500
		Midburg	500
North	9,900	North Springs	8,000
Market City Metro Area:	1,460,000		

Population Breakdown			
Group	Percent	Age	Percent
White	84.6%	12-24	26.0%
Black	13.0%	25-54	49.8%
Hispanic	2.4%	55+	24.2%

Education Statistics			
Education	Percent	Income	Percent
Less than 12 yrs.	1.5%	Less than 10K	24.5%
H.S. Graduate	74.1%	10-20K	28.3%
College Graduate	18.2%	20-30K	32.0%
Post Graduate	6.2%	30-50K	10.3%
		50K+	4.9%

Miscellaneous			
Colleges & Universities:		Military Bases:	
Major University	114,162	Ft. Army Camp -	3,000
Small College	4,000	Bigname Air Base -	3,275
Major Sport Teams: Baseball, Football, Basketball			
Facilities: Separate baseball and football stadiums, one indoor convention center.			

Table XIII-1b
Midwest City Market Profile

MEDIA PROFILE		
Newspapers		
Newspaper (am & pm)	Circulation (1988)	
Morning Paper	283,635	
Afternoon Paper	240,142	
Sunday Paper	402,142	
Television		
Station	Channel	Affiliation
KAAA	6	CBS
KBBB	7	ABC
KKKD (owns KKKA-AM & KKKE-FM)	8	NBC
KFFF	43	IND
KGGG	65	IND
KHHH (religious)	51	IND
KPBS (non-commercial)	18	PBS
Radio		
Radio Usage by Major Advertiser Categories (scale 1-5; 1=rarely users, 5=heavy users)		
Product	Usage	Product	Usage
Soft Drinks	4.7	Airlines	3.0
Fast Foods	4.3	Financial	2.7
Electronics	4.3	Utilities	2.3
Special Event	4.3	Farm	2.0
Beer/Wine	4.0	Sports	2.0
Clothing	3.3	Dept. Stores	2.0
Auto Dealers	3.3	Restaurants	2.0
Revenue Estimates			
	1988 Revenue	% of Adv. $	% of Retail Sales
Newspaper	$79,100,000	42.9%	0.82%
Television	$62,800,000	34.0%	0.65%
Radio	$34,500,000	18.7%	0.36%
Outdoor	$8,100,000	4.4%	0.08%

Table XIII-1c
Midwest City Market Profile

DEMOGRAPHIC & ECONOMIC STATISTICS			
General Information			
	Households in Metro Area:	543,160	
	Retail Sales:	$9.6 billion	
	Average Annual Revenue Growth:	(Projected 1988-1992)	8.90%
	Average Annual Retail Sales Growth:	1987-1991	8.67%
		1992-1996	8.35%

Employment

Job Description	Percent	Industry	Percent
Manager/Profess.	23.8%	Service	27.5%
Tech/Sales/Admin	34.6%	Manufacturing	20.1%
Service	12.1%	Retail	16.5%
Farm/Forest/Fish	1.1%	Transportation	10.3%
Precision Product	11.4%	Finance	7.5%
Operations/Labor	17.1%	Wholesale	5.9%

Important Industries:	Automotive	Unemployment	
	Airplane parts	Year	Percent
	Distribution	1982	3.9%
	Food Processing	1985	8.2%
	Agribusiness	1986	7.5%
	Printing	1987	5.3%
	Ammunition	1988	5.1%

Table XIII-2
Midwest City Market Growth

Year	Population (thousands)	Retail Sales (millions)	Gross Revenues (thousands)	Net Revenues (thousands)	Gross Revs. as % of Retail Sales	Gross Revs. per Capita
1983	1,390	$6,000	$22,300	$19,624	0.372%	$16.04
1984	1,410	$6,540	$24,200	$20,570	0.370%	$17.16
1985	1,420	$7,400	$26,700	$22,962	0.361%	$18.80
1986	1,440	$8,150	$28,900	$24,998	0.355%	$20.07
1987	1,450	$8,700	$31,300	$27,074	0.360%	$21.59
1988	1,460	$9,600	$34,500	$29,842	0.359%	$23.63
1989	1,470	$10,500	$37,600	$32,524	0.358%	$25.58
1990	1,480	$11,400	$40,900	$35,378	0.359%	$27.64
1991	1,490	$12,500	$44,650	$38,622	0.357%	$29.97
1992	1,500	$13,500	$48,600	$42,039	0.360%	$32.40
1993	1,510	$14,550	$52,900	$45,758	0.364%	$35.03
1994	1,520	$15,750	$57,600	$49,824	0.366%	$37.89
1995	1,530	$17,050	$62,700	$54,236	0.368%	$40.98
1996	1,540	$18,500	$68,300	$59,080	0.369%	$44.35
1997	1,550	$20,050	$74,400	$64,356	0.371%	$48.00
COMPOUNDED ANNUAL GROWTH						
1983-88		9.86%	9.12%	8.74%		
1983-93		9.26%	9.02%	8.83%		
1988-93		8.67%	8.92%	8.93%		
1993-97		8.35%	8.90%	8.90%		

Table XIII-3
Broker's Summary WBPE-FM, Midwest City

City of License: Newtown and West Midwest City
(15 miles west of the metro)

Dial Position - 103.5 Power - 100,000 watts ERP

Antenna - 850 feet height above average terrain (HAAT)

Market Rank: Arbitron MSA - 27, Revenue - 23

Construction Permit Granted for a new 1,200 foot tower. The FCC would allow a new owner one year to build a new tower and put on air. Estimated cost of tower project $1 million. The new tower would move the antenna six miles closer to the metro and make the station signal competitive.

Format: Album Rock - Consultant, (respected name)

Network: CBS RadioRadio

Real Estate: A three year option to purchase 30 acres of farm land at new tower site -- WBPE currently leases the land for $1,000 per month. WBPE has an agreement with a local farmer to sell the current tower land to him once a new tower site becomes active. Each parcel of land was appraised in late 1988 at $90,000.

Equipment: Reasonably new, mostly purchased during past 6 years.

Number of Employees: 18 full-time; 4 part-time

Arbitron Ratings (12+ metro, Mon-Sun, 6 a.m.-midnight)

1989			1988			1987	
Spring	Winter	Fall	Spring	Winter	Fall	Spring	Winter
2.3	3.4	2.7	3.0	3.2	5.6	3.8	4.1

Average Spot Rate (average of 11 dayparts):
1989: $43.50 \ 1988 $47.00 \ 1987 $47.06

Gross Sales:	1989 1st qtr	1988	1987
	$ 396,578	$ 1,654,311	$ 1,544,958
Cash Flow	$ NA	$ 79,407	$ 37,119

Table XIII-4
Midwest City Radio Stations - Spring 1989

FM	Format	Dial	City	Power	Height (feet)	Avg. Rate	Also Owns
WBPE	AOR	103.5	suburb	100 kW	880	$47.00	--
KKKE	AOR	102.1	metro	100 kW	940	$77.00	KKKA & TV
KKKB	CHR	104.3	metro	50 kW	953	$68.00	--
KKKM	CHR	98.9	suburb	100 kW	980	$36.00	--
KKKH	AC	98.1	metro	100 kW	550	$80.50	KKKK
KKKF	AC (soft)	93.3	metro	100 kW	428	$75.00	--
KKKD	Country	94.1	metro	100 kW	465	$58.00	KKKQ
KKKN	Country	94.9	metro	100 kW	1,057	$61.00	KKKG
KKKJ	Urban	106.5	metro	100 kW	450	$38.00	KKKP
KKKC	Bfl. Mus.	99.7	metro	100 kW	950	$76.00	KKKI
KKKO	Classical	96.5	metro	100 kW	546	$30.00	--
AM	Format	Dial	City	Power & Signal		Avg. Rate	Also Owns
KKKA	Country	610	metro	5 kW		$105.00	KKKE & TV
KKKQ	Country	1340	metro	1kW/250W		combo sale	KKKD
KKKG	NewsTalk	810	metro	50kW/5kW (DA-N)		$86.25	KKKN
KKKI	News	980	metro	5 kW (DA-N)		$59.00	KKKC
KKKK	AC	710	metro	10kW/5kW (DA-2)		$60.00	KKKH
KKKL	Nostalgia	1190	metro	5kW/250kW (DA-N)		$25.00	--
KKKP	Gospel	1590	metro	1 kW days		$25.00	KKKJ
KKKR	Religion	1510	suburb	10 kW days		$20.00	--

Note: These are the competitive stations in terms of advertising dollars and ratings in the metro -- total 19 stations out of 26 serving market. KKKN-FM switches format in June 1989 from Country to CHR. Legend: xkW/yW = Daytime power/nighttime power. For example, 5kW/250W means - 5,000 watts days and only 250 watts nights. Daytime station only -- no night service. DA-N = Directional antenna pattern at night. DA-2 = Two directional antenna patterns during day and night.

Table XIII-5
Midwest City Radio Station Ratings, 1987-1989

Station	Format	Winter 1989	Spring 1989	1989 Avg.	1988 Avg.	1987 Avg.	3-Year Avg.
KKKA	Country	10.7	10.5	10.6	9.9	11.0	10.5
KKKC-FM	Bfl. Music	8.5	7.8	8.2	9.0	6.0	7.7
KKKB-FM	CHR	7.1	8.9	8.0	8.0	8.7	8.2
KKKE-FM	AOR	6.8	5.9	6.4	6.0	7.1	6.5
KKKG	NewsTalk	6.8	5.2	6.0	7.2	6.9	6.7
KKKD-FM	Country	5.4	6.3	5.9	6.5	6.3	6.2
KKKH-FM	AC	6.4	5.1	5.8	5.7	5.2	5.6
KKKF-FM	AC(Soft)	6.0	5.4	5.7	7.0	7.0	6.6
KKKI	News	4.6	4.9	4.8	4.4	4.1	4.4
KKKJ-FM	Urban	4.7	4.5	4.6	5.0	5.6	5.1
KKKM-FM	CHR	4.6	3.8	4.2	2.5	2.5	3.1
KKKK	AC	3.2	4.0	3.6	4.0	4.3	4.0
KKKL	Nostalgia	3.4	3.9	3.7	3.9	4.6	4.1
KKKN-FM	Country	3.8	3.3	3.6	3.8	4.6	4.0
WBPE-FM	AOR	2.3	3.4	2.9	3.0	4.5	3.5
KKKO-FM	Classical	1.7	2.3	2.0	1.4	0.7	1.4
KKKP	Gospel	0.9	2.1	1.5	1.8	1.9	1.7
OTHERS	Various	6.1	6.9	6.5	5.6	4.3	5.5

Note: KKKN-FM changes format from Country to CHR in June 1989. All ratings based on Arbitron 12+ Metro share, average 14 hour, Monday through Sunday, 6:00 am to midnight.

Table XIII-6
Midwest City Market Revenue Leadership - 1988

Station (1)	Format (2)	1988 Gross Revs. ($000) (3)	1988 % of Mkt. Revs. (4)	Aud. Share (5)	Rev. Based on Aud. Share ($000) (6)	Ratio of Rev. to Audience (7)
KKKA	Country	$4,600	13.33%	9.9	$3,416	1.35
KKKG	NewsTalk	$3,700	10.72%	7.2	$2,484	1.49
KKKF-FM	AC(soft)	$3,400	9.86%	7.0	$2,415	1.41
KKKB-FM	CHR	$3,300	9.57%	8.3	$2,864	1.15
KKKC-FM	Bfl. Music	$2,900	8.41%	9.0	$3,105	0.93
KKKH-FM	AC	$2,700	7.83%	5.7	$1,967	1.37
KKKE-FM	AOR	$2,100	6.09%	6.0	$2,070	1.01
Avg. of 7 Leaders		$3,243	9.40%	7.6	$2,617	1.25
Avg. of 5 FM		$2,880	8.35%	7.2	$2,484	1.18
WBPE-FM	AOR	$1,689	4.89%	3.0	$1,035	1.63

Note: Total 1988 Market Radio Revenues estimated at $34,500,000. 1988 estimated mean revenue per share point estimated at $367,412. Legend: (4) = Percentage of market's total 1988 radio revenues; (5) = 1985 Average Audience Share - Arbitron, 12+ metro, Mon-Sun 6am-mid; (6) = Theoretical Revenues Based on Audience Share; (7) = Ratio of Revenue Share (4) divided by Audience Share (5).

Summary

- WBPE-FM, a Class C 100,000 watt FM, is licensed to a suburb of Midwest City, a competitive medium-sized radio market ranked 27th in size, but ranked 23rd in estimated radio revenues. It is a mature radio market, growing in population, retail sales, and radio revenues at a level below that of the national average. The market is attractive because of its quality characteristics and stable economy.

- The station is programmed to play Album Rock music, and directly competes with a leading FM that is owned by the same group that operates the leading AM station and a VHF TV in the market. WBPE has demonstrated its ability to generate revenue at a level outperforming its ratings, which have been on a decline since 1987.

- The station has secured the permits for a major signal improvement involving an expensive new tower project. It is believed that a new antenna site will provide the station with the edge it needs to effectively compete in the market.

- The asking price is $4.2 million cash for WBPE's assets.

- Due to WBPE's history of lackluster ratings, negative profits and poor cash flow performance, any determination of WBPE's fair market value will be based on its potential for improvement in ratings, revenues, cash flow and net earnings.

- Chapter XIV will use the basic data presented in this chapter, along with the buyer's goals and strategies, to construct the pricing model and apply it to the proposed purchase.

Chapter XIV:
Using the Present Value Pricing Model

It is not difficult to construct a pricing model. The one presented in this chapter is based on the guidelines presented in Chapter XII and builds mostly on the data presented in Chapter XIII. However, two additional sets of data -- WBPE's 1987 and 1988 income statement detailing sources of revenues and expenses, and WBPE's estimated depreciation schedule upon acquisition -- are presented in this chapter. The new data will be used in the present value analysis of the model to project WBPE's potential cash flow and after-tax earnings over a period of years. After the present value analysis is complete, Chapter XV will review five years of comparable station sales and compare the results with those found in the present value analysis.

Thus, the model's building blocks are generated from:

1) market revenue projections;

2) competing stations' rating and revenue shares;

3) WBPE's 1987 and 1988 income statement;

4) tax structure of the buying group;

5) strategy for positioning the station in the market;

6) new basis of depreciating the acquired assets;

7) schedule of debt service;

8) annual capital expenditure projection; and

9) assumed resale value of the station at a future date.

As the building blocks are quantified and computed for each year, the pricing model will begin to unfold in a series of exhibits (grouped together at the end of this chapter). Finally, the appraised value of WBPE will be estimated based on the present value analysis. The estimate will be compared against a comparable sales analysis discussed in Chapter XV.

The Buyer's Objectives

The proposed station buyer is a group of three individuals looking for their first station acquisition. They have structured their company as a Subchapter S Corporation (see glossary) because they want the projected tax losses during the development years of their station acquisition to flow through to their personal income tax statements. Although the 1986 Tax Reform Act restricted this practice, these investors can still take advantage of this option to a limited degree.

The group has capitalized their venture in the amount of $1.5 million, and has issued 1.5 million shares of common stock with a par value of $1 per share. Equity participation is on a one-to-one basis for each dollar of equity capital contributed by the principals. An additional 100,000 shares of common stock may be issued at a later date for the purpose of developing employee incentive plans.

The largest shareholder is a successful businessman who owns a Sales Motivation Consultancy agency specializing in newspaper, cable and broadcast clients in medium size markets. He has up to $850,000 to sink into the venture. The second largest shareholder is a local real estate developer who also owns land designated as the future tower site for WBPE. He is now leasing the option rights to the land to the current owners of WBPE. He is willing to invest $450,000 in the venture. The third stockholder is a broadcast engineer who works for a major defense contractor in the area. He is the only one with direct ownership experience, having managed his family-owned small market AM station before it was sold in 1982. He will be the active General Manager of the group's new station. He has only $300,000 of family money to invest in the venture. He also has the technical expertise that the group believes is essential to any new acquisition.

Each member of the group finds radio to be an attractive investment opportunity. They could easily afford a small market station but they want larger returns than a small station can offer. They prefer to invest in the Midwest area because it is the location of all of their other interests. They would not rule out another region, however, if the acquisition was a good deal.

Their strategy is to find a station with growth potential. They want the market to be solid and growing in terms of population, retail sales and radio revenue. They are especially interested in stations having temporary problems that can be fixed. They are convinced that the best deals will be stations with potential for technical improvements, especially FM stations. The broadcast engineer in the group has experience in helping other buyers locate stations with curable technical problems. The group believes that a turnaround situation may take at least five years for a station to reach its full cash flow potential. At that point, the group would consider selling the station, retiring any outstanding debt, and using the profits to acquire another turnaround situation or any "good" buy. Another option would be to use their matured station as collateral to make additional acquisitions.

The group estimates that the payback period (recovering the investment from the after-tax income streams) would be ten to twelve years, assuming the station performed close to projections for good to excellent returns. However, they believe that the most profitable strategy will be to develop the station to maturity and then resell it at the top of its performance cycle. In that approach, they define their payback period as eight years -- the time anticipated for station development and debt service.

The Market Strategy

The group considers Midwest City an attractive market for four reasons. First, the major market characteristics -- population, households, retail sales and radio revenues -- are growing at acceptable rates. Radio revenues for the market are projected to grow at approximately 8.9% compounded annually through 1993, and the group's evaluation technique extends the projection through 1997.

Second, Midwest City is not overly saturated with stations, it has 19 viable stations and its population rank is 27 and its revenue rank is 23.

Third, the group believes the market offers numerous qualitative attributes in demographics and lifestyles that are important for revenue growth. For example, Black and Hispanic minorities account for only about 15% of the population, leading to less fragmentation and fewer positioning problems for formats with non-minority appeal. On the other hand, the ethnic base is large enough to support Black and Urban formats. The market also contains college students and military personnel -- two helpful segments for contemporary music radio stations. In addition, sports and concerts -- two important revenue segments in radio -- are also very popular in the market.

Finally, the competitive atmosphere of the market is not expected to overwhelm a new independent owner. Midwest City is not slated for any new fulltime radio or television stations. Cable penetration has matured and is not expected to significantly grow. Market revenues are not expected to become significantly fragmented among the competing media.

Competitive factors may, however, be affected by deregulation. The FCC's recent decision to allow combination ownership of media in the same market, might lead to an independent owner having a tougher time competing for local advertising against combination buys offered by established group broadcasters. At present, only one combination owner (grandfathered before FCC rules), KKKA AM & FM & TV, competes in Midwest City. It is a long-term market leader with its AM, and a direct format competitor to WBPE with its FM.

Format Consideration

Programming will affect ratings and revenue projections. The latest rating summaries show that Midwest City is already saturated with contemporary program formats. Table XIV-1 details the format leadership for average share of the metro audience during the past three Arbitron rating books in Midwest City. Here is a summary of the formats on the FM dial:

Table XIV-1
Midwest City Leading FM Formats
(12+ Metro Share)

Format	Station	Winter 1989	Spring 1989	Fall 1989	Station Average	FORMAT AVERAGE
Beautiful Music	KKKC	8.5	7.8	7.5	7.9	7.9
Adult Contemporary	KKKH	6.4	5.1	6.3	5.9	6.0
	KKKF	6.0	5.4	6.5	6.0	
Contemporary Hit Radio	KKKB	7.1	8.9	6.7	7.6	5.8
	KKKM	4.6	3.8	3.8	4.1	
Country	KKKD	5.4	6.3	6.1	5.9	4.8
	KKKN	3.8	3.3	4.1	3.7	
Urban	KKKJ	4.7	4.5	4.7	4.6	4.6
Album Rock	KKKE	6.8	5.9	5.8	6.2	4.5
	WBPE	2.3	3.4	2.7	2.8	

WBPE is the second Album Rock formatted station. If they buy WBPE, the group would conduct in-depth market and audience research on format position and, based on the results, consider switching the format.

For the purposes of considering the acquisition, Album Rock and New Age formats are somewhat similar in terms of the ratings and revenue potential for the station. The only difference between the two formats is that revenue performance of New Age stations tends to run at about 90% of ratings performance. Album Rock stations typically have a better revenue-to-ratings share ratio. The group believes, however, that the format performance

differences are not significant because WBPE's major problem has been signal rather than format.

Expense Projections

WBPE's expenses have been kept low by the current owners, increasing about 7% per year between 1986 and estimated 1989. However, the expenses of the average radio station have been increasing about 13% compounded annually from 1979 to 1988. Of course, that was a period of high inflation. The buying group estimates that WBPE's expenses should increase 13% during the first year of acquisition, largely due to preparing for a new tower project and upgrading station staff, and will increase 10% during the second year, and 8% annually thereafter.

An evaluation of WBPE's income statement from 1987 and 1988 does not reveal any unusual expenses with respect to the typical FM station in Midwest City's market size. Table XIV-2 shows the income statements and compares the 1988 expense percentages with those supplied by the NAB/BFM for similar revenue-sized stations operating in 1988. The only items that stand out are depreciation, pre-tax profits and total expenses as percentage of net revenues. WBPE's 1988 depreciation was somewhat higher than the average FM station because WBPE probably had more top grade equipment than most FM stations in comparable markets. The percentage of total expenses to net revenues was higher compared to the average station because WBPE ranked in the bottom third of the market for gross revenues. Net revenues are estimated to run 86.6% of gross revenues, based on average sales commissions for stations in markets comparable to WBPE. Of course, the commission base may vary depending on station policy and the ratio of national and regional sales to local sales.

Revenue Projections

Revenue projections are based on radio market revenue increases and on WBPE's anticipated share of the market revenues. The group is impressed that WBPE's revenue share is 4.89%, a full 53.2% higher than what its share should be, based on its audience ratings. The group believes that it can increase WBPE's revenue share over an eight year period to an average of 7.6% with good performance, 6.6% with moderate performance, and only 5.5% with poor performance. An alternative projection for poor performance assumes that the station would be sold after only three years of operation. In this "bail out" scenario, the station's revenue share is estimated at an average of only 5.0%

Table XIV-2a
WBPE-FM Income and Expenses

	1988	1987	1988 %	NAB/BFM %	Measure Used
Network	$17,636	$16,249	1.1%	1.3%	of total time sales
National	$339,804	$302,380	21.5%	21.5%	of total time sales
Local	$1,226,408	$1,116,411	77.4%	77.2%	of total time sales
TOTAL TIME SALES	$1,583,848	$1,435,040			
Other Revenues	$1,052	$681	0.1%	0.1%	of total time sales
Agency & Rep. Commiss.	$227,083	$205,741	14.3%	14.8%	of total time sales
NET REVENUES	$1,357,817	$1,229,980	85.7%	87.6%	of total time sales
EXPENSES (By Dept.)					
Technical Salaries	$32,800	$31,160	5.3%	4.8%	of tot. salaries
Direct Technical	$44,534	$47,200			
Line Charges	$4,127	$4,617			
TOTAL Engineering	$81,461	$82,977	5.9%	4.5%	of tot. expenses
Program Salaries	$211,738	$204,962	34.3%	36.4%	of tot. salaries
Consultant	$24,690	$22,813			
Promotion	$41,513	$39,003			
Research	$6,687	$4,250			
Music License Fees	$36,542	$33,480			
Outside News Serv.	$5,847	$5,491			
Other Program Expen.	$9,422	$8,386			
TOTAL Program	$336,439	$318,385	24.3%	23.1%	of tot. expenses
Sales Salaries	$134,439	$127,717	40.6%	38.7%	of tot. salaries
Staff Commissions	$116,156	$105,654			
Rating Services	$23,095	$21,160			
Research	$2,750	$2,091			
Travel & Entertain.	$23,766	$22,340			
Automobile	$13,553	$13,553			
Other	$12,138	$14,172			
TOTAL Sales	$325,897	$306,687	23.6%	23.6%	of tot. expenses

Table XIV-2b
WBPE-FM Income and Expenses

	1988	1987	1988 %	NAB/BFM %	Measured Used
Adv. & Promotion	$179,444	$161,499			
Adv. & Promo (Barter)	$34,954	$31,408			
TOTAL Adv. & Promo.	$214,398	$192,907	15.5%	21.4%	of tot. expenses
G & A Salaries	$122,334	$117,440	19.8%	20.1%	of tot. salaries
Payroll Taxes & Ben.	$119,789	$111,517			
Space & Utilities	$84,617	$82,163			
Professional Service	$13,025	$11,832			
Insurance	$5,847	$5,672			
Corporate Development	$25,580	$23,436			
Automobile	$19,991	$19,206			
Travel & Entertain.	$16,828	$15,145			
Collection Losses	$16,079	$14,731			
TOTAL Gen. & Admin.	$424,090	$401,142	30.7%	24.7%	of tot. expenses
TOTAL EXPENSES	$1,382,285	$1,302,098	94.6%	66.2%	of net revenue
CASH FLOW	($24,468)	($72,118)	5.4%	33.8%	of net revenue
Interest	$555,950	$627,651			
Depreciation	$96,217	$131,645			
PRE-TAX PROFIT	($676,635)	($831,414)	-39.2%	20.9%	of net revenue
Technical	$32,800	$31,160			
Program	$211,738	$204,962			
Sales	$250,595	$233,371			
G&A	$122,334	$117,440			
TOTAL Salaries	$617,467	$586,933	44.7%	43.2%	of total exp.

Improved ratings (and their impact on revenues) is a key assumption in all projection scenarios. Average annual compounded growth of revenues, expenses and operating profits is projected to be as follows for each performance scenario:

Operation Horizon	Performance Scenario	Net Revenues Ann. Growth	Oper. Expenses Ann. Growth	Oper. Profit Ann. Growth
8 Years	Good	18.6%	8.9%	76.9%
8 Years	Moderate	16.7%	8.9%	70.9%
8 Years	Poor	12.6%	8.9%	53.8%
3 Years	Bail Out	14.2%	10.3%	103.4%

Historically, two things are encouraging. First, the market seems very supportive of new stations. In 1984, WBPE debuted a new Album Rock format and received a 3.6 rating share. The current owners changed the call letters and reintroduced the same format in 1986 and achieved a 4.5 average audience rating. Both rating debuts gradually declined because the novelty of a new station in town eventually wore off as listeners became disenchanted with the signal reception. With a competitive signal, WBPE could achieve a significant ratings improvement that would reasonably provide WBPE with revenue shares that grow from 4.6% upwards to 9.1% annually, depending on performance. Second, an evaluation of the market leaders in 1988 shows that stations with audience ratings that ranged from a 6 to 10 share supported revenues that ranged from 6.1% to 13.3% of total market radio revenues. (See Table XIII-8 in the previous chapter.)

The New Tower Site

The station's single largest liability is its signal problem. Three previous owners have tried and failed to compete in the marketplace with the current tower site. A new tower site closer to the metro with a higher antenna is essential to any future success. After careful research, with the help of a nationally respected engineering consultant, the group believes that the signal problem can be corrected.

The strategy is to purchase and lease back a new tower, antenna and transmitter at 14% interest over a 12 year term. This will allow the group to avoid a $1 million dollar cash outlay, although the amortization payments will be an estimated $173,000 per year. If the station is acquired in January of 1990, the new tower should be in operation by late fall. The group plans to sell the old tower, antenna and transmitter for an estimated $164,000 in salvage value in early 1992. The estimated income to be received from the salvage is computed into the present value analysis. It is not included in the figures for net revenues because the income is not derived from operations. It is, however, reflected in pre-tax profits, and will be taxed at ordinary rates of income.

Capitalization of Assets

Upon examination of WBPE's tangible assets, the buying group believes it can "step-up" the basis of those assets as much as 20% over their current book value of $902,000. In other words, the replacement market value of those acquired assets, before depreciation, would be an estimated $1,082,000. Table XIV-3 shows the anticipated depreciation schedule of WBPE, after "stepping up" the basis of the acquired assets. The tangible assets are listed along with estimates for each asset's stepped-up market value, stand-alone resale value, base value and accounting life. Annual depreciation has been estimated on a straight line basis by the following:

MARKET VALUE less RESIDUAL VALUE = BASE VALUE divided by LIFE

The proposed schedule provides a general estimation for the purpose of the pricing exercise. A more precise estimate would be based on an accelerated depreciation schedule over five years at rates of 15%, 22%, 21%, 21% and 21%. Residual value would also be ignored under current IRS guidelines for accelerated cost recovery. However, by using a straight line method, accumulated depreciation is estimated at over $627,000 from 1990 through 1997, and would be taxable at ordinary income rates upon resale of the station.

A more sophisticated approach might be used, whereby outside consultants would provide a contemporaneous asset appraisal based on the use and market value of the assets. Outside appraisers are often used in negotiations between the buyers and sellers in order to establish a basis for allocating the purchase price among the assets. Outside appraisers also provide expert testimony in tax cases and estate settlements to establish the value of assets.

The use of professional firms specializing in broadcast appraisals and tax aspects helps new owners to realize their maximum tax benefits without overstepping the IRS guidelines for depreciation of assets. The IRS often challenges overly aggressive efforts to step-up the value and accelerate the depreciation of newly acquired assets.

In addition, tax consultants could help the buyer use commonly accepted acceleration techniques to provide more depreciable deductions during the early years of ownership. Thus, the estimated results shown in Table XIV-3 are presented as part of the pricing exercise and are probably conservative compared to the deductions which might be realized in a real acquisition.

Table XIV-3 WBPE-FM Depreciation Schedule
1990-1997

Item	Market	Residual	Base Value	Life	1990	1991	1992	1993	1994	1995	1996	1997
Leasehold Improvements	$134,000	$0	$134,000	10	$13,400	$13,400	$13,400	$13,400	$13,400	$13,400	$13,400	$13,400
Installation	$49,000	$0	$49,000	10	$4,900	$4,900	$4,900	$4,900	$4,900	$4,900	$4,900	$4,900
Buildings	$22,000	$2,200	$19,800	12	$1,650	$1,650	$1,650	$1,650	$1,650	$1,650	$1,650	$1,650
Building Improvements	$28,500	$0	$28,500	10	$2,850	$2,850	$2,850	$2,850	$2,850	$2,850	$2,850	$2,850
CURRENT TOWER	$265,000	$132,500	$132,500	7	$18,929	$18,929	SOLD					
ANTENNA	$77,000	$7,700	$69,300	7	$9,900	$9,900	SOLD					
TRANSMITTER	$119,000	$23,800	$95,200	5	$19,040	$19,040	SOLD					
Studio Equipment	$62,000	$6,200	$55,800	5	$11,160	$11,160	$11,160	$11,160	$11,160			
Production Equipment	$46,000	$4,600	$41,400	5	$8,280	$8,280	$8,280	$1,275	$1,275	$1,275		
Newsroom Equipment	$8,500	$850	$7,650	6	$1,275	$1,275	$1,275					
Music Production	$9,500	$950	$8,550	3	$2,850	$2,850	$2,850					
Airchain & Test	$37,000	$3,700	$33,300	6	$5,550	$5,550	$5,550	$5,550	$5,550	$5,550		
Tape & Carts	$6,500	$650	$5,850	3	$1,950	$1,950	$1,950					
Record Library	$41,000	$4,100	$36,900	6	$6,150	$6,150	$6,150	$6,150	$6,150	$6,150		
Furniture & Fixtures	$138,000	$13,800	$124,200	5	$24,840	$24,840	$24,840	$24,840	$24,840			
Automobiles	$9,700	$1,940	$7,760	4	$1,940	$1,940	$1,940	$1,940				
Lease Acquisitions	$29,500	$0	$29,500	8	$3,688	$3,688	$3,688	$3,688	$3,688	$3,688	$3,688	$3,688
Total Depreciation					$138,351	$138,351	$90,482	$85,682	$83,742	$39,462	$26,488	$26,488

Estimated Debt Service

The group is looking for an acquisition in the $3.5-$4.5 million range and has up to $1.5 million in cash to invest. They have a relationship with a bank experienced in broadcast lending, and willing to loan $3 million on an eight year term at 12% interest with $1.5 million amortized, and the remaining $1.5 million of principal to be paid in a balloon at the end of the loan term.

Table XIV-4 shows two projected debt schedules, based on anticipated cash flow performance for 1990 through 1997 on a principal of $3 million, at 12% simple interest. Moderate cash flow performance would leave a $1.2 million principal balloon at the end of 1997, while good cash flow performance would leave only a $400,000 balloon payment. Debt service under the poor performance scenario is not shown, but is based on rolling over the balance and paying interest on the entire debt principal over eight years. Actually, poor performance debt service becomes academic because, if it appeared that ratings and revenues would not improve after three years of operation, the group would sell the station to cut losses. The bail out performance scenario discussed later is based on such an outcome.

Tax Impact

The buying group's tax liabilities are estimated based on current federal tax rates for corporations of about 34%. State income tax at 5% is also computed into the pricing model, and is deducted from taxable income before federal taxes are computed. As mentioned in Chapter XI, tax reform likely lessened the buying group's tax liability and increased the after tax earnings.

Upon future resale of WBPE by the buying group, the individual stockholders must pay capital gains taxes at the ordinary income tax rate of 28%. Capital gains liability is limited in the Poor Performance scenario because of accumulated tax losses. It is not a factor in the bail out scenario because it assumes station value would not significantly appreciate after only three years of poor performance operation, and because heavy tax losses would carry forward to net against any capital gains.

Depreciation recapture liability is computed into the Good and Moderate performance scenarios. It is estimated at $268,000 after eight years of operation, and is based on the total accumulated depreciation deductions from taxable income during ownership. The recapture liability is not a factor in the Bail Out Performance scenario because of tax losses that would carry forward. Recapture does not actually show up in the Poor Performance scenario, but it is matched against the accumulated tax losses, with the remainder of the losses applied against capital gains.

Table XIV-4
WBPE-FM Projected Debt Schedule at 12% Interest
($000)

MODERATE PERFORMANCE DEBT SCHEDULE								
	1990	1991	1992	1993	1994	1995	1996	1997
Principal	$3,000	$3,000	$3,000	$3,000	$3,000	$2,900	$2,500	$1,900
Interest	$360	$360	$360	$360	$360	$348	$300	$228
Prin. P'ment	$0	$0	$0	$0	$100	$400	$600	$700
Balance Due	$3,000	$3,000	$3,000	$3,000	$2,900	$2,500	$1,900	$1,200
GOOD PERFORMANCE DEBT SCHEDULE								
	1990	1991	1992	1993	1994	1995	1996	1997
Principal	$3,000	$3,000	$3,000	$3,000	$3,000	$2,600	$1,800	$1,200
Interest	$360	$360	$360	$360	$360	$312	$216	$144
Prin. P'ment	$0	$0	$0	$0	$400	$800	$600	$800
Balance Due	$3,000	$3,000	$3,000	$3,000	$2,600	$1,000	$1,200	$400

Note: Size of principal determined by owners and subject to terms of loan agreement. This schedule assumes that the owners will want to reduce the principal and resulting interest payment as much as possible without risking a drain on working capital that may be needed for unanticipated cash outlays.

Since fewer than 35 investors are involved in the buying group, a Subchapter S corporation structure is an attractive way to distribute these tax benefits so that the write offs flow through directly to the investors' personal income tax returns. If more than 35 investors were involved, the buyers might have opted for a limited partnership structure. In each of these structures, the owners can share the tax benefits.

Projecting Net Present Value (NPV) of Future Income

Four performance scenarios are used in the present value analysis -- Good, Moderate, Poor and Bail Out -- and each scenario is in two parts -- Pre-tax Earnings and Net Present Value (NPV). The pre-tax earnings tables project the station's financial performance over the term of ownership. The NPV tables discount the annual after-tax income streams and state the value in terms of their present value. Each table corresponds to a performance scenario.

Pre-tax earnings are a function of station ratings, share of market revenues, cash flow expenses, and final deductions for depreciation, amortization and interest. NPV is a function of state and federal taxes, net income after taxes and the effects of carryforward losses, depreciation add-back, annual capital expenditures, and the discount factor for the time value of money.

Net Income is profit after taxes. The annual capital expenditures for new equipment are deducted from net income, and the depreciation/amortization deduction -- a noncash charge -- is added back to determine the future after-tax cash flow. The capital expenditures are estimated to be $25,000 during the first year of operation, and projected to increase 5% annually thereafter.

The present value factor used in the exercise is 12% and can be found on any Present Value Table by looking at the appropriate time horizon. The following is the applicable segment of the table as used in the present value analysis:

Period (Time Horizon)	12% Factor Present Value
1 year	.8929
2 year	.7972
3 year	.7118
4 year	.6355
5 year	.5674
6 year	.5066
7 year	.4523
8 year	.4039

For example, if the future after-tax profit is $553,000 in 1993, the present value of that figure is $351,000 -- or what it is worth today. It is computed by multiplying the factor in the fourth period -- .6355 -- by $553,000. If another present value factor is used, such as 11%, it can be computed by appropriately adjusting the discount value. For example, if a 10% factor in the fourth period is .6830, the 11% factor would be .6593.

Tables XIV-5, 7, 9 and 11 (at the end of this chapter) show the estimated Pre-tax Earnings for the four performance scenarios. Tables XIV-6, 8, 10, and 12 (also at the end of this chapter) show the NPV of after-tax cash flow and future resale for the performance scenarios.

Residual Value (Resale Value)

The bottoms of each of the NPV tables (Tables XIV-6, 8, 10, and 12) show the projected Fair Market Value (FMV) of WBPE in 1990 dollars. A 33% risk discount is used in the scenarios because of the risk involved in valuing the station into the future.

The 33% factor is an arbitrary number. Industry consultants, who specialize in fair market value appraisals, vary the risk factor in the range of 20% to 40%, depending on the time horizon and the individual situation. WBPE deserves a higher risk factor than might be applied to a station with a history of cash flow and good signal coverage. Any risk factor should be standardized when using an array of valuation projections with the same time horizon.

The residual value, upon projected resale in 1998, comprises the largest part of the total Fair Market Value. In the Good, Moderate and Poor performance scenarios, the residual value has been conservatively figured by averaging the multiples of 2.5 times net revenues and eight times broadcast cash flow. In the Bail Out scenario, the residual value is based only on the 2.5 multiples of net revenues because the cash flow in that case is too low to be considered. If the station had a history of positive cash flow and revenues, higher multiples -- such as 3-times net revenues and 9-times cash flow -- would be used for residual value. Considering WBPE's unimpressive financial history, lower multiples are more realistic for the purposes of the pricing exercise.

As mentioned above in the "Tax Impact" section, a projected 28% capital gains tax has been deducted from the appreciated resale value in the Good and Moderate scenarios, and to a limited extent, in the Poor scenario. The Bail Out scenario is not affected by capital gains because of the tax losses carryforward.

Results of Present Value Analysis

The results of the performance scenarios for WBPE's net present value as of January 1st, 1990 are as follows:

Bail Out:	$1,387,000
Poor:	$1,727,000
Moderate:	$4,546,000
Good:	$6,762,000

As mentioned, the buyer's strategy is to bail out if the station's ratings and revenues do not show significant signs of improvement during the first three years of operation. Therefore, only three of the performance scenarios -- Good, Moderate, Bail Out -- will be used to estimate an average NPV, assuming equal probabilities of each scenario occurring. If the

buyers were committed to a longer operation horizon, the Poor scenario outcome would be used in place of the Bail Out. The differing outcomes from averaging the sets of outcomes does not significantly alter the estimated NPV. The average NPV of each of the performance sets are:

Poor, Moderate, Good:	$4,345,000
Bail Out, Moderate, Good:	$4,231,667

A weighted average method could also be used to arrive at a value when multiple scenarios are involved. Each scenario would be assigned a percentage probability of occurrence. The reader can further explore the weighted average approach by consulting any basic text book on statistics.

Summary

- The pricing model is built with data collected about the market, the competition and the station. The building blocks include the market's gross and net revenue projections, radio station shares of market ratings and revenues, WBPE's income statement, the buying group's tax structure, and the buyer's strategy for positioning and programming the station, for financing the acquisition, and for reselling the station.

- The buyer's objectives are to acquire a medium sized market FM that shows growth potential for ratings and revenues. They expect the station to reach its cash flow potential after five years of operation, and to generate enough profits to service most long term debt after eight years of operation. At that time, they plan to sell the station for a large profit, or to use the station as leverage for new acquisitions.

- WBPE is attractive because of the market's quality characteristics, the programming options it offers, and the nature of the competition. Although the market is growing at only a moderate rate, the prospective buyers believe that the station can generate good revenues and profits with a competitive signal.

- Four performance scenarios are used for projections: Good, Moderate, Poor and Bail Out. The first three are based on eight years of operating revenues and expenses, while the last is based on cutting losses by selling the station after only three years of operation.

- Expenses have been kept low by the current owners. The buying group believes that it would have to increase expenses 13% during the first year of operation, 10% during the second year, and 8% annually thereafter. Examination of WBPE's 1988 income statement does not reveal any unusual line items compared to the latest NAB/BFM survey of comparable revenue-sized FM stations.

- Revenue projections are based on the station's proven ability to outperform its rating shares. The market's leading revenue stations outperform ratings at an average rate of 1.17.

- Depending on performance, WBPE is projected to produce compounded annual average growth of net revenues ranging from 13%-19%, and operating profits ranging from 54% to 103%.

- Depreciation deductions are based on the accounting life of the acquired assets, and stepping up the basis of the assets 20% over their book value. However, the accumulated depreciation of $627,000 over eight years is taxable at ordinary income rates upon resale of the station.

- The group would structure the financing of a new tower project with a lease purchase buy-back arrangement over 12 years at 14%. The tax deductible lease payments would be amortized at $173,000 annually.

- Tax impacts include a 5% state tax on income, with state taxes deductible before federal tax is computed. Federal tax is estimated at 1989 income rates -- approximately 34%. Capital gains is estimated at only 28% of the appreciated resale value. The group would structure itself as a Subchapter S Corporation in order to let the tax benefits flow through to their personal tax returns.

- The present value analysis is designed to determine the current value of the station based on (1) annual income streams, after deductions for interest, depreciation, amortization, taxes and capital expenditures; and (2) the resale value at a future date after deductions for depreciation recapture and capital gains taxes. The income streams and the resale value are adjusted to present value (January 1st, 1990) using the 12% discount factor appropriate for each time horizon. The factors can be found in a present value table.

- The resale value is estimated by applying realistic multiples to the station's net revenues and operating cash flow after eight years of operation. The multiples used are 2.5 times net revenues and eight times cash flow. The resale value is the average of the two outcomes, less a 33% risk factor for valuing the stations so far into the future, less 28% capital gains tax and $268,000 in depreciation recapture taxes.

- The present value analysis uses the Good, Moderate and Bail Out scenarios to estimate the station's purchase value. The average of the three scenarios is $4,231,667.

Table XIV-5
Pre-Tax Income - Good Performance
($000)

Year	Market Revenues (1)	Aud. Share (2)	Rev. Share (3)	Rev/Aud Share (4) (3/2)	Net Revenues (5) (3*1)	Oper. Expenses (6)	Cash Flow (7) (5-6)	Cash Margin (8) (7/5)	Lease Amorti (9)	Depre (10)	Interest (11)	Pre-Tax Profits (12) (7-9-10	Profits Margin (13) (12/5)
1987	$27,074	4.5%	5.0%	1.11	$1,354	$1,302	$52	3.8%	$0	$131	$628	($707)	-52.2%
1988	$29,842	3.0%	4.9%	1.63	$1,462	$1,382	$80	5.5%	$0	$96	$556	($572)	-39.1%
ESTIMATED													
1989	$32,524	2.6%	4.6%	1.77	$1,496	$1,465	$31	2.1%	$0	$79	$473	($521)	-34.8%
ACQUISITION & PROJECTION													
1990	$35,378	4.0%	5.2%	1.30	$1,840	$1,656	$184	10.0%	$173	$138	$360	($487)	-26.5%
1991	$38,622	5.0%	6.1%	1.22	$2,356	$1,821	$535	22.7%	$173	$138	$360	($136)	-5.8%
1992	$42,039	6.0%	7.0%	1.17	$2,943	$1,967	$976	33.2%	$173	$90	$360	$353	12.0%
1993	$45,758	6.5%	7.7%	1.18	$3,523	$2,124	$1,399	39.7%	$173	$86	$360	$780	22.1%
1994	$49,824	7.0%	8.2%	1.17	$4,086	$2,294	$1,792	43.9%	$173	$84	$360	$1,175	28.7%
1995	$54,236	7.5%	8.6%	1.15	$4,664	$2,478	$2,186	46.9%	$173	$39	$312	$1,662	35.6%
1996	$59,080	8.0%	8.9%	1.11	$5,258	$2,676	$2,582	49.1%	$173	$26	$216	$2,167	41.2%
1997	$64,356	9.1%	9.1%	1.00	$5,856	$2,890	$2,966	50.6%	$173	$26	$144	$2,623	44.8%
Avg. Share 1990-97		6.6%	7.6%	1.16									
Compounded Annual Growth 1989 - 1997					18.6%	8.9%	76.9%						

Column Notes:

(4) Rev/Aud is revenue share (3) divided by audience share (2). Ratio shows how well the station is outperforming ratings when generating revenues.
(5) WBPE Net Revenue projections based on goals for Revenue Share, (3).
(6) Operating Expense before depreciation, amortization and interest is projected to increase 13% during 1990, 10% during 1991, and 8% annually thereafter.
(12) Pre-tax Profits after deductions for amoritization, depreciation and interest. Pre-tax profit for 1992 includes additonal income of $164,000 from anticipated sale of old tower, antenna and transmitter.

Table XIV-6
Net Present Value - Good Performance ($000)

Future Year	Cume Prof.(Loss) (1)	Deprec. (2)	Taxable Income State (3)	Taxable Income Federal (4)	Income Taxes State (5)	Income Taxes Federal (6)	Net Income (7) (3-5-6)	Capital Expenses (8)	After-Tax Profit (9) (7-8+2)	Pres. Value@ 12% Annual (10)	Pres. Value@ 12% Cume (11)
1990	($487)	$138	($487)	($487)	$0	$0	($487)	$25	($374)	($334)	($334)
1991	($623)	$138	($136)	($136)	$0	$0	($136)	$26	($24)	($19)	($353)
1992	($106)	$90	$517	$517	$0	$0	$517	$28	$579	$412	$59
1993	$674	$86	$780	$741	$39	$252	$489	$29	$546	$347	$406
1994	$1,848	$84	$1,174	$1,115	$59	$379	$736	$30	$790	$448	$854
1995	$3,510	$39	$1,662	$1,579	$83	$537	$1,042	$32	$1,049	$532	$1,386
1996	$5,677	$26	$2,167	$2,059	$108	$700	$1,359	$34	$1,351	$611	$1,997
1997	$8,300	$26	$2,623	$2,492	$131	$847	$1,645	$35	$1,635	$661	$2,658

Sell in year 1998 for 2.5 times 1997 Net Revenues	$14,640
Or 8 times 1997 Operating Profit	$23,728
Average of Both Outcomes	$19,184
Less 33% Valuation of Risk	($6,331)
Subtotal	$12,853
Less Depreciation Reapture (1990-97)	$268
Less 28% Capital Gains Tax	($2,423)
Subtotal	$10,162
Discounted to Present Value 12%	$4,104
Plus Cume After-Tax Cash Flow at Present Value	$2,658
Net Present Value of WBPE	$6,762

Column Notes:
(1) Cumulative pre-tax losses to match against any tax liability for depreciation recapture and capital gains.
(2) Federal taxable income after state taxes of 5% (5) are deducted.
(8) Capital expenditures for improvements and equipment projected to increase 5% annually.

Table XIV-7
Pre-Tax Income - Moderate Performance
($000)

Year	Market Revenues (1)	Aud. Share (2)	Rev. Share (3)	Rev/Aud Share (4) (3/2)	Net Revenues (5) (3*1)	Oper. Expenses (6)	Cash Flow (7) (5-6)	Cash Margin (8) (7/5)	Lease Amorti (9)	Depre (10)	Interest (11)	Pre-Tax Profits (12) (7-9-10-11)	Profits Margin (13) (12/5)
1987	$27,074	4.5%	5.0%	1.11	$1,354	$1,302	$52	3.8%	$0	$131	$628	($707)	-52.2%
1988	$29,842	3.0%	4.9%	1.63	$1,462	$1,382	$80	5.5%	$0	$96	$556	($572)	-39.1%
ESTIMATED													
1989	$32,524	2.6%	4.6%	1.77	$1,496	$1,465	$31	2.1%	$0	$79	$473	($521)	-34.8%
ACQUISITION & PROJECTION													
1990	$35,378	3.8%	5.0%	1.32	$1,769	$1,656	$113	6.4%	$173	$138	$360	($558)	-31.6%
1991	$38,622	4.5%	5.5%	1.22	$2,124	$1,821	$303	14.3%	$173	$138	$360	($368)	-17.3%
1992	$42,039	5.0%	6.0%	1.20	$2,522	$1,967	$555	22.0%	$173	$90	$360	($68)	-2.7%
1993	$45,758	5.5%	6.5%	1.18	$2,974	$2,124	$850	28.6%	$173	$86	$360	$231	7.8%
1994	$49,824	6.0%	6.9%	1.15	$3,438	$2,294	$1,144	33.3%	$173	$84	$360	$527	15.3%
1995	$54,236	6.5%	7.3%	1.12	$3,959	$2,478	$1,481	37.4%	$173	$39	$348	$921	23.3%
1996	$59,080	7.0%	7.7%	1.10	$4,549	$2,676	$1,873	41.2%	$173	$26	$300	$1,374	30.2%
1997	$64,356	7.4%	8.0%	1.08	$5,148	$2,890	$2,258	43.9%	$173	$26	$228	$1,831	35.6%
Avg. Share 1990-97		5.7%	6.6%	1.16									
Compounded Annual Growth 1989-97					16.7%	8.9%	70.9%						

Column Notes:

(4) Rev/Aud is revenue share (3) divided by audience share (2). Ratio shows how well the station is outperforming ratings when generating revenues.

(5) WBPE Net Revenue projections based on goals for Revenue Share, (3).

(6) Operating Expense before depreciation, amortization and interest is projected to increase 13% during 1990, 10% during 1991, and 8% annually thereafter.

(12) Pre-tax Profits after deductions for amoritization, depreciation and interest. Pre-tax profit for 1992 includes additonal income of $164,000 from anticipated sale of old tower, antenna and transmitter.

Table XIV-8
Net Present Value - Moderate Performance ($000)

Future Year	Cume Prof.(Loss) (1)	Deprec. (2)	Taxable Income State (3)	Taxable Income Federal (4)	Income Taxes State (5)	Income Taxes Federal (6)	Net Income (7) (3-5-6)	Capital Expenses (8)	After-Tax Profit (9) (7-8+2)	Pres. Value@ 12% Annual (10)	Pres. Value@ 12% Cume (11)
1990	($558)	$138	($558)	($558)	$0	$0	($558)	$25	($445)	($397)	($397)
1991	($926)	$138	($368)	($368)	$0	$0	($368)	$26	($256)	($204)	($602)
1992	($830)	$90	$96	$96	$0	$0	$96	$28	$158	$113	($489)
1993	($599)	$86	$231	$231	$0	$0	$231	$29	$288	$183	($306)
1994	($72)	$84	$527	$527	$0	$0	$527	$30	$581	$329	$24
1995	$849	$39	$921	$875	$46	$297	$577	$32	$585	$296	$320
1996	$2,223	$26	$1,374	$1,305	$69	$444	$861	$34	$854	$386	$706
1997	$4,054	$26	$1,831	$1,739	$92	$591	$1,148	$35	$1,139	$460	$1,166

Sell in year 1998 for 2.5 times 1997 Net Revenues	$12,870
Or 8 times 1997 Operating Profit	$18,064
Average of Both Outcomes	$15,467
Less 33% Valuation of Risk	($5,104)
Subtotal	$10,363
Less Depreciation Reapture (1990-97)	($268)
Less 28% Capital Gains Tax	($1,726)
Subtotal	$8,369
Discounted to Present Value 12%	$3,380
Plus Cume After-Tax Cash Flow at Present Value	$1,166
Net Present Value of WBPE	**$4,546**

Column Notes:
(1) Cumulative pre-tax losses to match against any tax liability for depreciation recapture and capital gains.
(2) Federal taxable income after state taxes of 5% (5) are deducted.
(8) Capital expenditures for improvements and equipment projected to increase 5% annually.

Table XIV-9
Pre-Tax Income - Poor Performance
($000)

Year	Market Revenues (1)	Aud. Share (2)	Rev. Share (3)	Rev/Aud Share (4) (3/2)	Net Revenues (5) (3*1)	Oper. Expenses (6)	Cash Flow (7) (5-6)	Cash Margin (8) (7/5)	Lease Amorti (9)	Depre (10)	Interest (11)	Pre-Tax Profits (12) (7-9-10-11)	Profits Margin (13) (12/5)
1987	$27,074	4.5%	5.0%	1.11	$1,354	$1,302	$52	3.8%	$0	$131	$628	($707)	-52.2%
1988	$29,842	3.0%	4.9%	1.63	$1,462	$1,382	$80	5.5%	$0	$96	$556	($572)	-39.1%
ESTIMATED													
1989	$32,524	2.6%	4.6%	1.77	$1,496	$1,465	$31	2.1%	$0	$79	$473	($521)	-34.8%
ACQUISITION & PROJECTION													
1990	$35,378	3.5%	4.6%	1.31	$1,627	$1,656	($29)	-1.8%	$173	$138	$360	($700)	-43.0%
1991	$38,622	4.0%	5.0%	1.25	$1,931	$1,821	$110	5.7%	$173	$138	$360	($561)	-29.0%
1992	$42,039	4.5%	5.3%	1.18	$2,228	$1,967	$261	11.7%	$173	$90	$360	($362)	-16.2%
1993	$45,758	4.8%	5.6%	1.17	$2,562	$2,124	$438	17.1%	$173	$86	$360	($181)	-7.0%
1994	$49,824	5.1%	5.8%	1.14	$2,890	$2,294	$596	20.6%	$173	$84	$360	($21)	-0.7%
1995	$54,236	5.3%	6.0%	1.13	$3,254	$2,478	$776	23.9%	$173	$39	$348	$216	6.6%
1996	$59,080	5.4%	6.0%	1.11	$3,545	$2,676	$869	24.5%	$173	$26	$300	$370	10.4%
1997	$64,356	5.5%	6.0%	1.09	$3,861	$2,890	$971	25.2%	$173	$26	$228	$544	14.1%
Avg. Share 1990-97		4.8%	5.5%	1.17									
Compounded Annual Growth 1989-97					12.6%	8.9%	53.8%						

Column Notes:
(4) Rev/Aud is revenue share (3) divided by audience share (2). Ratio shows how well the station is outperforming ratings when generating revenues.
(5) WBPE Net Revenue projections based on goals for Revenue Share, (3).
(6) Operating Expense before depreciation, amortization and interest is projected to increase 13% during 1990, 10% during 1991, and 8% annually thereafter.
(12) Pre-tax Profits after deductions for amoritization, depreciation and interest. Pre-tax profit includes additonal income of $164,000 from anticipated sale of old tower, antenna and transmitter.

Table XIV-10
Net Present Value - Poor Performance ($000)

Future Year	Cume Prof.(Loss) (1)	Deprec. (2)	Taxable Income State (3)	Taxable Income Federal (4)	Income Taxes State (5)	Income Taxes Federal (6)	Net Income (7) (3-5-6)	Capital Expenses (8)	After-Tax Profit (9) (7-8+2)	Pres. Value@ 12% Annual (10)	Pres. Value@ 12% Cume (11)
1990	($669)	$138	($669)	($669)	$0	$0	($669)	$25	($556)	($496)	($496)
1991	($1,230)	$138	($561)	($561)	$0	$0	($561)	$26	($449)	($358)	($855)
1992	($1,428)	$90	($198)	($198)	$0	$0	($198)	$28	($136)	($96)	($951)
1993	($1,609)	$86	($181)	($181)	$0	$0	($181)	$29	($124)	($79)	($1,030)
1994	($1,631)	$84	($22)	($22)	$0	$0	($22)	$30	$32	$18	($1,012)
1995	($1,415)	$39	$216	$216	$0	$0	$216	$32	$223	$113	($899)
1996	($1,045)	$26	$370	$370	$0	$0	$370	$34	$362	$164	($735)
1997	($501)	$26	$544	$544	$0	$0	$544	$35	$535	$216	($519)

Sell in year 1998 for 2.5 times 1997 Net Revenues	$9,653	
Or 8 times 1997 Operating Profit	$7,768	
Average of Both Outcomes	$8,710	
Less 33% Valuation of Risk	($2,874)	
Subtotal	$5,836	
Less Depreciation Reapture (1990-97)	-0-	Due To Tax Loss
Less 28% Capital Gains Tax	($275)	Due To Tax Loss
Subtotal	$5,561	
Discounted to Present Value 12%	$2,246	
Plus Cume After-Tax Cash Flow at Present Value	($519)	
Net Present Value of WBPE	$1,727	

Column Notes:
(1) Cumulative pre-tax losses to match against any tax liability for depreciation recapture and capital gains.
(2) Federal taxable income after state taxes of 5% (5) are deducted.
(8) Capital expenditures for improvements and equipment projected to increase 5% annually.

Table XIV-11
Pre-Tax Income - Bail-Out Performance
($000)

Year	Market Revenues (1)	Aud. Share (2)	Rev. Share (3)	Rev/Aud Share (4) (3/2)	Net Revenues (5) (3*1)	Oper. Expenses (6)	Cash Flow (7) (5-6)	Cash Margin (8) (7/5)	Lease Amorti (9)	Depre (10)	Interest (11)	Pre-Tax Profits (12) (7-9-10-11)	Profits Margin (13) (12/5)
1987	$27,074	4.5%	5.0%	1.11	$1,354	$1,302	$52	3.8%	$0	$131	$628	($707)	-52.2%
1988	$29,842	3.0%	4.9%	1.63	$1,462	$1,382	$80	5.5%	$0	$96	$556	($572)	-39.1%
ESTIMATED													
1989	$32,524	2.6%	4.6%	1.77	$1,496	$1,465	$31	2.1%	$0	$79	$473	($521)	-34.8%
ACQUISITION & PROJECTION													
1990	$35,378	3.5%	4.6%	1.31	$1,627	$1,656	($29)	-1.8%	$173	$138	$360	($700)	-43.0%
1991	$38,622	4.0%	5.0%	1.25	$1,931	$1,821	$110	5.7%	$173	$138	$360	($561)	-29.0%
1992	$42,039	4.5%	5.3%	1.18	$2,228	$1,967	$261	11.7%	$173	$90	$360	($362)	-16.2%
1993	$45,758	4.8%	5.6%	1.17	$2,562	$2,124	$438	17.1%	$173	$86	$360	($181)	-7.0%
Avg. Share 1990-93		4.0%	5.0%	1.24									
Compounded Annual Growth 1989-93					14.2%	10.3%	103.4%						

Column Notes:
(4) Rev/Aud is revenue share (3) divided by audience share (2). Ratio shows how well the station is outperforming ratings when generating revenues.
(5) WBPE Net Revenue projections based on goals for Revenue Share, (3).
(6) Operating Expense before depreciation, amortization and interest is projected to increase 13% during 1990, 10% during 1991, and 8% annually thereafter.
(12) Pre-tax Profits after deductions for amoritization, depreciation and interest. Pre-tax profit in 1992 includes additonal income of $164,000 from anticipated sale of old tower, antenna and transmitter.

Table XIV-12
Net Present Value - Bail-Out Performance ($000)

Future Year	Cume Prof.(Loss) (1)	Deprec. (2)	Taxable Income State (3)	Taxable Income Federal (4)	Income Taxes State (5)	Income Taxes Federal (6)	Net Income (7) (3-5-6)	Capital Expenses (8)	After-Tax Profit (9) (7-8+2)	Pres. Value@ 12% Annual (10)	Pres. Value@ 12% Cume (11)
1990	($699)	$138	($699)	($699)	$0	$0	($699)	$25	($586)	($523)	($523)
1991	($1,260)	$138	($561)	($561)	$0	$0	($561)	$26	($449)	($358)	($881)
1992	($1,458)	$90	($198)	($198)	$0	$0	($198)	$28	($136)	($96)	($978)
1993	($1,639)	$86	($181)	($181)	$0	$0	($181)	$29	($124)	($70)	($1,048)

Sell in year 1998 for 2.5 times 1997 Net Revenues	$6,405	
Or 8 times 1997 Operating Profit	N/A	(Too Low to Consider)
Average of Both Outcomes	$6,405	
Less 33% Valuation of Risk	($2,114)	
Subtotal	$4,291	
Less Depreciation Reapture (1990-97)	-0-	Due To Tax Loss
Less 28% Capital Gains Tax	-0-	Due To Tax Loss
Subtotal	$4,291	
Discounted to Present Value 12%	$2,435	
Plus Cume After-Tax Cash Flow at Present Value	($1,048)	
Net Present Value of WBPE	$1,387	

Column Notes:
(1) Cumulative pre-tax losses to match against any tax liablity for depreciation recapture and capital gains.
(4) Federal taxable income after state taxes of 5% (column 5) are deducted.
(8) Capital expenditures for improvements and equipment projected to increase 5% annually.

Chapter XV:
Comparable Sales Analysis and Fair Market Value

The pricing exercise demonstrated in the present value analysis is based on assumptions and projections. While the estimates are based on the best station and market values available, and the results are tempered with a range of performance scenarios and with risk discounts, the outcomes are still only educated guesses. Any reliable fair market valuation should be compared with actual station sales that are comparable in terms of facilities and market to the station being considered for acquisition. This chapter will analyze five years of station sales in markets similar in revenue size to Midwest City.

Limitations of the Comparable Sales Approach

The comparable sales approach discussed in this chapter is also somewhat limited as a measure of station values. First, the five year time horizon equates a 1983 sale with the value of a 1988 sale. During that time, however, station values have appreciated due to both internal and external factors. Internally, station revenue growth is common, especially in high growth markets. Externally, inflation affected the value of many stations, boosting resale values in the same way that inflation contributed to the rise in prices of residential housing during the late 1970s and early 1980s. For whatever reason a station appreciates in value, it is not uncommon to find stations that have literally doubled in value over a five year period.

A second problem in the comparable sales approach involves the value of assets owned by different stations. Some stations own many tangible assets, such as auxiliary towers, studios and buildings. Other stations may lease all of their most valuable tangible assets and, as a result, allocate most of the purchase price to intangibles.

Finally, the purchase price may be a rough estimate of the station sold in combination with another AM or FM. Some of the estimates are more difficult to arrive at because the sale may have been part of a station group involving many AM, FM and television stations.

Statistical methods can be applied to correct the distortions of the comparable sales approach. The necessary research would be extensive and would focus on adjustments for differing asset values, signal coverage, facility quality, and the future value of differing time horizons. Some professional appraisal firms do perform the statistical adjustments for their clients when making a Fair Market Value appraisal. It is beyond the scope of this exercise to engage in these kind of adjustments. For the purposes of the pricing exercise, comparable sales analysis is a reference point for the present value analysis discussed in Chapter XIV.

Analysis of Station Sales Comparable to WBPE

Radio station sales were listed from 1983 through 1988 for ten comparable markets, covering the 18th through 28th largest metros for radio revenue. Midwest City is ranked 23rd, thus five of the markets are ranked ahead and five are ranked below Midwest City. The listing included only stations that were purchased for 100% of their assets, and sales that did not involve a lot of real estate. Inclusion of partial sales and major real estate would tend to distort the analysis of comparable sales.

Some of the sales were stand-alone AM stations, some stand-alone FM stations, and some were sales of combination AM and FM stations. Each combination sale was counted as two separate stations. This tends to overvalue AM and undervalue FM stations involved in the combination because many of the AM stations in a combination sale are usually daytime only stations or limited power (Class IV) stations.

Another listing was made of only the stand-alone FM stations sold in the comparable markets. These are the most valid sales to compare with WBPE.

A third listing was made of the sales in Midwest City. These were broken down by total sales and by FM only station sales. Only three transactions were made in Midwest City in 1987 and 1988: one combination AM/FM in 1987, and one AM and one FM in 1988. Only five of the transactions since 1983 involved stand alone FM stations, and one of those was a suburban FM station that does not compete well in the metro. The most recent stand-alone FM station transaction, KKKD, sold for $4 million cash in early 1988. The average price of a Midwest City FM transaction would appear to be undervalued compared to an FM transaction in the second quarter 1989.

Tables XV-2 through XV-4 (grouped together at the end of this Chapter) list the various transactions for total station sales in metro and suburbs, total station sales in metro only, FM only station sales in metro and suburbs and Midwest City sales. Table XV-1 summarizes the mean and median prices for each exhibit.

Table XV-1
Summary of Comparative Station Sales Prices

Type of Sale	Median Price	Mean Price
Total sales AM & FM - Metro & Surburbs	$4,000	$4,951
Total Sales AM & FM - Metro only	$3,250	$5,152
FM Sales - Metro & Surburbs	$4,000	$4,318
FM Sales - Metro oly	$4,000	$4,650
Midwest City Sales - AM & FM - Metro & Surburbs	---	$4,733
Midwest City Sales - FM only - Metro & Surburbs	---	$3,280
Midwest City Sales - FM only - Metro only	---	$3,675

Fair Market Value Results of Pricing Model

Intuitively, the mean and median figures for FM sales, metro and suburban, would seem to be the most valid for comparison with the present value analysis discussed in Chapter XIV. First, WBPE is a suburban FM station serving the metro. Second, as mentioned, the mean and median prices of the AM/FM combination stations tend to devalue the FMs and overvalue the AMs. More AM than FM stations are included in the sales list. Finally, there are too few Midwest City sales to use for comparison.

Based on the arguments stated above, the comparable sales analysis would value the station at between $4.19 million and $4.31 million. This range is nearly identical to the $4.23 million to $4.35 million range arrived at through the present value analysis. The final price may be affected by the terms of the purchase agreement. For example, the difference between the seller's asking price of $4.2 million cash and the value to the buyer may be bridged by the structure of agreements for non-competition and collection of accounts receivable.

Summary

- A comparable sales analysis is used as a reference point to the results of the present value analysis. There are various limitations to the comparable sales analysis as presented in this Chapter. It is still a useful part of the pricing exercise.

- In comparing WBPE's value to that of other stations, five years of station sales are analyzed in comparable size markets for radio revenues. Only the stations that sold for 100% of the assets are considered. The analysis categorizes the mean and median values of AM and FM stations in suburbs and metros, in metros only, of FM only stations in suburbs and metros, and AM and FM stations in Midwest City.

- The results of the comparable sales analysis for mean and median prices range from $3.3 million to $4.3 million. Intuitively, only the FM sales median of $4.2 million seems the most valid for comparison.

- The results of analyzing the median prices paid for FM stations in similar markets to Midwest City compares favorably with the results of the present value analysis discussed in Chapter XIV. Used together in a pricing model, the fair market value of WBPE ranges from $4.19 million to $4.35 million.

- The pricing model exercise will give the buyer and the seller a realistic appraisal of WBPE's value to the proposed buyer. It will also help to eliminate a lot of wasted energy and time once the parties sit down to negotiate. The final purchase price would depend on how a purchase agreement is structured for variables such as collection of receivables and non-compete agreements between the buyer and seller.

Table XV-2a
Comparable Sales - All Stations, 1983-1988
(Market Revenue Sizes 18-28)

Rank	Market	AM	FM	Combo (AM/FM)	Price ($000)	Place	Year
18	PITTSBURGH	WJAS			$1,500		1987
18	PITTSBURGH	KQV			$2,000		1985
18	PITTSBURGH		WSHH		$2,700		1986
18	PITTSBURGH			WPIT AM/FM	$7,200		1987
19	DENVER			KBRQ AM/FM	$4,900		1984
19	DENVER	KHOW			$15,000		1984
19	DENVER	KNUS			$2,500		1984
19	DENVER		KLIR		$5,000		1984
19	DENVER		KOSI		$7,500		1984
19	DENVER			KLAK/KPPL	$7,000		1985
19	DENVER	KWBZ			$1,000		1985
19	DENVER		KVOD		$6,000		1986
19	DENVER	KRZN			$1,050		1987
19	DENVER	KLZS			$1,780		1988
20	SAN DIEGO	KJQY			$6,400		1983
20	SAN DIEGO		KCBQ		$5,250		1984
20	SAN DIEGO		KBZT		$6,300		1985
20	SAN DIEGO			KCBQ AM/FM	$8,500		1986
20	SAN DIEGO			KSON AM/FM	$7,700		1987
20	SAN DIEGO		KBZT		$4,950		1988
21	CINCINNATI			WMLX/WUBE	$3,900		1983
21	CINCINNATI			WSAI AM/FM	$5,200		1985
21	CINCINNATI	WCIN			$2,250		1985
21	CINCINNATI			WMLX/WUBE	$8,800		1987
21	CINCINNATI			WLW/WSKS	$10,500		1987
21	CINCINNATI		WLYK		$850		1987

Table XV-2b
Comparable Sales - All Stations, 1983-1988
(Market Revenue Sizes 18-28)

Rank	Market	AM	FM	Combo (AM/FM)	Price ($000)	Place	Year
22	PHOENIX			KMEO AM/FM	$4,000		1983
22	PHOENIX			KZZP AM/FM	$2,500		1983
22	PHOENIX	KPHX			$650		1983
22	PHOENIX			KJJJ/KEZC	$6,250		1984
22	PHOENIX	KARZ			$2,000		1985
22	PHOENIX			KJJJ/KEZC	$2,000		1986
22	PHOENIX		KNNN		$3,980		1986
22	PHOENIX	KDJQ			$200		1987
22	PHOENIX			KOY/KQYT	$12,000		1987
22	PHOENIX	KSUN			$470		1987
22	PHOENIX		KHEP		$6,000		1987
22	PHOENIX			KMEO AM/FM	$16,000		1988
23	MIDWEST	KKKK			$3,500		1988
23	MIDWEST		KKKD		$4,000		1988
23	MIDWEST			KKKG/KKKN	$12,000		1987
23	MIDWEST			KKKG/KKKN	$8,000		1986
23	MIDWEST		KKKF		$3,100		1985
23	MIDWEST		KKKB		$5,250		1985
23	MIDWEST		WBPE		$2,350		1985
23	MIDWEST			KKKD AM/FM	$2,700		1984
23	MIDWEST		KKKM		$1,700	Suburb	1985
24	KANSAS CITY			KCKN/KFKF	$2,700		1984
24	KANSAS CITY		KBEQ		$5,250		1985
24	KANSAS CITY		KLSI		$3,100		1985
24	KANSAS CITY			KCMO/KCEZ	$8,000		1986
24	KANSAS CITY			KCMO AM/FM	$12,000		1987
24	KANSAS CITY		KKCI		$4,200		1987
24	KANSAS CITY		KRKR		$4,000		1987
24	KANSAS CITY	WHB			$3,500		1988
24	KANSAS CITY			KCLO/KZZC	$1,700	Suburb	1985
24	KANSAS CITY			KLDY/KCCI	$2,350	Suburb	1985

Table XV-2c
Comparable Sales - All Stations, 1983-1988
(Market Revenue Sizes 18-28)

Rank	Market	AM	FM	Combo (AM/FM)	Price ($000)	Place	Year
25	PORTLAND			KCNR AM/FM	$3,500		1984
25	PORTLAND			KYTE/KLLB	$4,500		1985
25	PORTLAND			KCNR AM/FM	$6,975		1988
25	PORTLAND			KEX/KQFM	$8,000		1986
25	PORTLAND		KMJK		$2,500		1986
26	INDIANAPOLI	WIFE			$1,300		1984
26	INDIANAPOLI		WTLC		$3,730		1984
26	INDIANAPOLI			WIBC/WNAP	$21,000		1986
26	INDIANAPOLI	WATI			$300		1987
26	INDIANAPOLI	WMLF			$875		1987
26	INDIANAPOLI		WZLP		$11,000		1988
27	MILWAUKEE			WEMP/WMYX	$3,300		1984
27	MILWAUKEE		WMGF		$2,000		1985
27	MILWAUKEE			WOKY/WMIL	$4,750		1986
27	MILWAUKEE		WMGF		$3,200		1986
27	MILWAUKEE			WZUU AM/FM	$4,900		1988
27	MILWAUKEE		WFMR		$2,000	Suburb	1986
28	TAMPA	WTAN			$575		1983
28	TAMPA		WCKX		$4,000		1983
28	TAMPA		WIQI		$4,000		1983
28	TAMPA		WWBA		$7,000		1984
28	TAMPA			WFLA/WOJC	$14,000		1985
28	TAMPA	WPLP			$1,000		1986
28	TAMPA	WDAE			$5,700		1987
28	TAMPA	WPLP			$850		1987
28	TAMPA	WSUN			$7,500		1987
28	TAMPA			WWQT/WHBS	$1,275	Suburb	1986

SUMMARY Total Sales - AM & FM	Median	Mean	Total Sales
All Sales (metro & suburbs)	$4,000	$4,951	$410,910
Metro Sales (no suburbs)	$3,250	$5,152	$401,885

Table XV-3
Comparable Sales - FM Only Stations, 1983-1988
(Market Revenue Sizes 18-28)

Rank	Market	Calls	Price ($000)	Place	Year
18	PITTSBURGH	WSHH	$2,700		1986
19	DENVER	KLIR	$5,000		1984
19	DENVER	KOSI	$7,500		1984
19	DENVER	KVOD	$6,000		1986
20	SAN DIEGO	KCBQ	$5,250		1984
20	SAN DIEGO	KBZT	$6,300		1985
20	SAN DIEGO	KBZT	$4,950		1988
21	CINCINNATI	WLYK	$850		1987
22	PHOENIX	KNNN	$3,980		1986
22	PHOENIX	KHEP	$6,000		1987
23	MIDWEST CITY	KKKD	$4,000		1988
23	MIDWEST CITY	KKKF	$3,100		1985
23	MIDWEST CITY	KKKB	$5,250		1985
23	MIDWEST CITY	WBPE	$2,350		1985
23	MIDWEST CITY	KKKM	$1,700	Suburb	1985
24	KANSAS CITY	KBEQ	$5,250		1985
24	KANSAS CITY	KLSI	$3,100		1985
24	KANSAS CITY	KKCI	$4,200		1987
24	KANSAS CITY	KRKR	$4,000		1987
25	PORTLAND	KMJK	$2,500		1986
26	INDIANAPOLIS	WTLC	$3,730		1984
26	INDIANAPOLIS	WZLP	$11,000		1988
27	MILWAUKEE	WMGF	$2,000		1985
27	MILWAUKEE	WMGF	$3,200		1986
27	MILWAUKEE	WFMR	$2,000	Suburb	1986
28	TAMPA ST. PETE	WCKX	$4,000		1983
28	TAMPA ST. PETE	WIQI	$4,000		1983
28	TAMPA ST. PETE	WWBA	$7,000		1984
SUMMARY Total Sales		**Median**	**Mean**	**Total Sales**	
All Sales (metro & suburbs)		**$4,000**	**$4,318**	**$120,910**	
Metro Sales		**$4,000**	**$4,650**	**$117,210**	

Table XV-4
Comparable Sales
Midwest City Stations, 1983-1988

Rank	Market	AM	FM	Combo (AM/FM)	Price ($000)	Place	Year
23	Midwest City	KKKK			$3,500		1988
23	Midwest City		KKKD		$4,000		1987
23	Midwest City			KKKG/KKKN	$12,000		1987
23	Midwest City			KKKG/KKKN	$8,000		1986
23	Midwest City		KKKF		$3,100		1985
23	Midwest City		KKKB		$5,250		1985
23	Midwest City		WBPE		$2,350		1985
23	Midwest City			KKKD AM/FM	$2,700		1984
23	Midwest City		KKKM		$1,700	Suburb	1984
SUMMARY Total Sales - AM & FM					**Mean Price**	**Total Sales**	
All Sales (metro & suburbs)					**$4,733**	**$42,600**	
AM Sales ONLY - (metro & suburbs)					**$3,280**	**$16,400**	
FM Sales ONLY - (metro only)					**$3,675**	**$14,700**	

Chapter XVI:
Concluding Comments

The preceding chapters highlight the business and operational aspects of commercial radio broadcasting, and discussed how these affect the financial evaluation of radio stations. The material is an overview of the considerations involved in station acquisition and management strategy. Although the various tables and charts provide guidelines for comparing the merits of different radio stations, these quantitative data are ONLY benchmarks. Every radio station and every market it serves is unique in potential opportunities, risks and challenges. Thus, a station deal may look very bad compared to the benchmarks, and still turn out to be a huge success. Conversely, a station deal may meet all of the success standards discussed in this book and still turn out to be a big mistake for the buyer.

Intangible forces often dictate the financial success or failure of radio stations. It is difficult to quantify these forces and predict the outcome. The possibilities are endless due to the combination of station, market, competition, format, listener, advertiser, seller, buyer, lender, management, regulations and timing. The reader is cautioned to use the material addressed in this book so as to develop a framework for decision making about station evaluation, acquisition and operation.

Selecting a Financial Model

The pricing model presented in this book is not an ultimate or absolute evaluation technique. It is simply an evaluation tool. As previously mentioned, numerous evaluation techniques and models are being used by professional consultants and financial planners. Many are more sophisticated than the one presented in this book.

Appraisers should select a model that most accurately fits the particular station and market. For example, a station with a history of established ratings, revenues and expenses offers an opportunity for more accurate earning projections. The fact that it enjoys steady performance will often add an additional premium to the value of the station beyond what the pricing model suggests. Most brokers would love to have an exclusive listing on a station with a history of steady performance. Unfortunately, the listings are flooded with stations touting "projected cash flow for next year..."

The best advice to those attempting financial evaluation is to quantify as many aspects of the station and the market that can be segmented and defined. For example, if the station primarily serves listeners and advertisers in a section of the larger metro, projection of the

station's revenue will depend on the level of retail sales in the section being served, not the entire metro. In addition, if the station targets a particular audience segment and advertiser segment, the station's ratings and revenue projections must reflect that core of the target. For example, if the station programs mostly Black music in a market with only 12% Black population, and the market is not expected to grow significantly in that segment, it is highly unlikely that the station will ever achieve an 8 or 9 share rating and take a leading position in market revenues. Finally, if the station is locked into a signal disadvantage, it will never grow significantly in ratings and revenues.

Thus, models are a useful tool if they are properly designed and applied to an appropriate situation. Evaluation and projections are dependent on the validity of the input: "garbage in, garbage out models" are worthless.

Appraisal Consultants

A station owner recently described the material presented in the station appraisal report (for which he contracted) as "voodoo accounting." After talking with him about his misgivings, it became clear that the report was not the issue -- his comprehension of it was. His situation is not unique. Many owners, sellers and managers are very successful at operating a broadcast station but have no idea how to determine its value.

Professional consulting firms are an excellent source for further explanation of the techniques involved in financial evaluation, projections and pricing models. Some of these firms use large data bases and sophisticated statistical approaches to pricing and evaluation. Their services may include asset appraisals, fair market valuation, and customized research for a particular need. Only a few firms specialize in broadcast appraisals and their names can be found in the *Broadcasting-Cable Yearbook* or obtained from NAB reference sources.

The process of selecting an appraisal firm is similar to hiring any professional consultant. The contracting party should contact several, explain what they think their needs are, find out what services the firm can provide, and determine the costs involved. Most charge a flat fee, plus an hourly rate and travel expenses.

A reputable consultant will be very cooperative in explaining the appraisal techniques and the terminology involved. They have nothing to gain by keeping their clients in the dark. In fact, most firms welcome clients who are familiar with the pricing techniques of comparable sales, market evaluation and discount analysis because it makes the consultant's job easier. A common language also breeds trust and fosters innovation that benefits both parties.

Professional appraisers are analysts, not speculators. They use a rational process to realistically evaluate any given situation and help the client make a better informed financial decision. Most appraisal consultants do not believe that a wild speculative trend on station

values will benefit the broadcasting industry. Rather, they look at broadcasting as a business, with growth opportunities that could suffer if buyers and sellers haphazardly bid up station prices without using the tools to accurately value the properties and make informed decisions.

Do's And Don'ts[1]

Accurate station pricing is only one aspect of acquiring a successful station. The dream will not become reality without good operations. The following are random suggestions that touch on both pricing and operations.

For those who seek action, here are the "do's:"

DO use some sort of financial evaluation technique, however simple, before verbalizing the value of a station. Be sure that the value fits your financial situation, and not someone else's.

DO get expert advice from consultants or brokers with a background in finance.

DO develop a relationship with various lenders before you need a loan. Let them know who you are and your acquisition and management goals. Ask their advice.

DO sell yourself, your ideas, your vision when talking to lenders and investors. They are banking on you as much as the venture.

DO ask an appraiser about any term or technique that you do not understand. There is no need to be intimidated by "voodoo accounting."

DO quantify, as accurately as possible, any segments that can be, such as revenues, expenses, ratings, retail sales, rate cards, demographics, advertising base, etc.

DO subscribe to the leading industry periodicals and annuals...and, read them! Too many managers and owners fail to use these valuable sources of industry information.

DO base station pricing on the competition. Figuring out competitors' strengths and weaknesses, and projecting the outcomes, may provide the best insight into how to beat them.

DO be nice when you take over a station. Morale is usually low and everyone is scared to death of you. Be honest and fair when dealing with your employees. Remember, they were there before you showed up, and you can not gain anything in the market by starting out with a bad reputation.

DO hire the best people you can afford. The best investment is in good management. Avoid hiring friends and family who are not ready for an important position. You can always replace an incompetent employee if you do not have to share dinner with them at your sister-in-law's.

DO remember that when you deal with programming people and talent, you are dealing with "artists" (you know, people with talent!). These people got into the industry because they have an emotional desire to share their talent and be loved. If you can not support your programming people, find programmers who you can support. It is tough to make major changes in the habits of programmers and on-air talent. You can motivate them to try new things, but generally you cannot remake them into your idea of what they should be.

DO change the station's image quickly and completely. If you opt to change the programming, do not drag it out. Change the call letters and format together. Once everything is in place and most of the bugs are worked out, do three things: Promote, Promote and Promote! Then, promote some more.

DO look for ways to keep your rates high, and your logs full. Selling radio time is a combination of art and science, and enthusiastic hardworking sales people are worth their weight in gold. They need your support, training and encouragement.

DO get involved in your station. Learn how the station operates. Sit in on a sales meeting (quietly). Sit in the studio (very quietly) while the talent is on-air and get a feel for the air sound, the talent and the phone callers. Review the equipment with the engineer and ask questions. Gain a feel for how difficult each job is so that you have some basis for evaluating performance.

DO have some fun. Radio is a very enjoyable business, especially if you can make a profit and repay your loans.

If you value caution and preparation, here are the "don'ts:"

DON'T believe any pricing model or financial evaluation technique has all the answers. It is a tool to help you make better decisions. Most likely, the legends of the broadcasting industry did not know anything about pricing models and present value analysis. They had foresight and ideas and a special entrepreneurial spirit that can't be found in any model or publication. The pioneers were, and today's leaders are, geniuses in the industry. If you are not a genius, use a pricing model and ask other geniuses for advice before you buy.

DON'T accept one opinion as the absolute truth (especially your own) about the worth of a station or the attractiveness of a market. Get second opinions, and thirds.

DON'T go looking for a station to buy unless you have an idea where you will obtain the financing. A good deal will not wait around for you to find the money.

DON'T go to a lender unless you have a business plan, in writing, for debt repayment and operations. They may look at you as just another "jerk" who wants to be in "show-biz."

DON'T overlook the value of seller financing. Senior lenders view seller paper like equity when considering your loan.

DON'T assume that you can "step-up" the value of the acquired assets by 50% or more and justify it to the IRS. The tax courts are full of defendants who lamely claim that "everyone else is doing it."

DON'T assume that an FM station will be more profitable than an AM station. Nothing in the industry research suggests that one kind of service is more profitable than the other. Many successful group owners have at least one AM station that is their star moneymaker.

DON'T accept unquestioningly that a station's technical capability can be improved with a simple piece of hardware or an uncomplicated application to the FCC. Check out the engineering before you buy, and use an outside engineering consultant -- not the current owner's engineer.

DON'T let the networks undercompensate you. You have to sell networks on paying you higher rates, just like you have to sell any advertiser on paying higher rates.

DON'T get hooked on prestige. Classical music and beautiful music formats may not be as profitable as religious and rock-n-roll.

DON'T buy a station in a top-20 size market unless you have a lot of money with which to promote, and a superb programming and management staff.

DON'T ask programming advice from program syndicators and record company representatives, unless you want advice that will help them.

DON'T get involved in every minor operational detail of your station unless you own a station in the smallest town on earth. Pay attention to the strategy for improving the value of your station. That is a fulltime job in itself. Let the good people you hire make the daily operation decisions. They are probably better at those than you are.

DON'T stop keeping up with the industry. Broadcasting is a business dependent on technology, and technology is moving at the speed of light. Read the trade literature and attend the industry conventions. Exchange ideas and create new ones!

Glossary

Accelerated Depreciation: Any method of calculating the depreciation of a fixed asset where more depreciation is charged in the first years of service of the equipment than in the later years.

ADI: Area of Dominant Influence, or the television market designation used by Arbitron. All counties in the U.S. belong to only one ADI. The ADI roughly corresponds to a broadcast station's signal coverage area. Arbitron also issues rating reports for radio using ADI categories. However, ADI is not generally used to buy radio advertising, except in a media mix placement of radio and TV.

Aging of Receivables: Accounts receivable are generally classified by how current they are. The goal of most companies is to keep the aging to under 30 days -- in other words to collect the payments within that time period. A certain percentage of receivables are carried on the books for longer periods -- 60 days, 90 days, etc. Those are often discounted on a company's accounting statements, because an older receivable is considered worth less than a current one.

Allocation of Stations: The method by which the FCC designates a broadcasting channel on which a station operates, with power and signal coverage limitations, in particular regions.

Allocation of Purchase Price: The way that a buyer and seller specify how much the assets are worth in the purchase of a station. Allocation agreements are a way to specify the value of acquired assets in the event of challenge by a tax court, or a civil action in an estate settlement.

Amortization: The process of retiring a debt by making scheduled payments -- usually including the interest on the outstanding principal balance -- over a period of time.

Assets: The material property or right to own property with a monetary value. Tangible assets include cash, securities, receivables, prepaid expenses, land, buildings and equipment. Most tangible assets are depreciable. Intangible assets include goodwill, advertising and affiliation contracts, patents, copyrights, and -- most important of all -- the FCC license. Many intangible assets may be amortized and depreciated such as favorable loan and lease agreements, management and talent contracts, mailing lists, etc. Some of these intangible assets may be more valuable than tangible assets.

Average Quarter Hour: The average number of listeners to a radio station during any 15-minute segment. It is expressed either as a number or a share.

Balloon Payments: Sometimes referred to as the "back end," a balloon payment is the lump sum payment made at the end of a scheduled debt, usually following a series of smaller scheduled payments. Typically, a balloon structure means that the lender has received scheduled interest payments on the outstanding balance during the loan term.

Barter: Sometimes called "trade-out" or "trade," barter refers to the station's exchange of commercial time for services or products. The ratio of the barter may vary. For example, the station may run ads for a local restaurant at the ratio of 2 to 1, or $2 of air time for every $1 of meals. Barter is sometimes overused by small market stations, and tends to devalue the station's income statement. The wisest use of barter is for advertising time on local television stations and space in the local newspaper which can be used to promote the radio station.

Book Value: The net value of an asset carried on financial statements, after accumulated depreciation has been deducted from the original cost.

CMSA: Consolidated Metropolitan Statistical Area, or the combined MSA's in adjacent markets served by broadcast stations. An example is the Dallas-Ft. Worth area or the Miami-Hollywood-Ft. Lauderdale area. Arbitron issues CMSA reports on radio listening levels.

CPM: The cost per thousand of listeners of a radio commercial. Each commercial has a potential to reach a certain number of people based on the station's rating. The CPM is a function of the station's reach and the cost of ad placement to the advertiser.

Capital Outlay: The purchase of expensive equipment or property, such as a broadcasting tower or a new building. Generally, a capital outlay is not figured into the annual operating expenses, but is accounted for separately.

Cash Flow: The operating profit before deduction of depreciation, amortization, interest and taxes. It is "cash in" versus "cash out." Unusual expenses, such as large salaries and expenses to an absentee owner, should also be deducted from expenses before cash flow is computed.

Commercial Load: The number of commercial advertisements scheduled to run each hour on a station.

Commitment Fee: A bank charge on the unused portion of a revolving credit line. The fee to the borrower usually ranges from 0.5% to 1% of the unused portion.

Convertible Securities: Bonds and preferred stock that are exchangeable, at the option of the holder, into common stock of the entity that issued the securities. Convertibles are often used as a form of subordinated debt.

Cume: The number of different people listening during any given daypart (for at least five minutes), or during the total week. This reflects the station's total audience regardless of time spent listening.

Dayparts: Broad hour segments of audience listening, such as morning drive (6 a.m.- 10 a.m.), middays (10 a.m.- 4 p.m.), afternoon drive (3 p.m.- 7 p.m.), evenings (7 p.m.- 1 a.m.), and overnight (1 a.m.- 6 p.m.). Advertising is often designed to reach specific audiences during specific dayparts.

Debt Service: The annual payments of both interest and principal required to retire a loan according to the provisions of the loan agreement.

Default: A violation of any term in a loan agreement may trigger a "default," whereby the lender is allowed to demand payment of the entire outstanding loan balance. If the payment cannot be made, the lender can take control of the property pledged against the loan and sell it to recover the money owed by the borrower.

Depreciation: Writing off the value of an asset over a specified period of time. Under straight line depreciation, for example, you write off 10% of the value of a new asset each year for ten years. Depreciation is based on the realization that equipment, buildings, etc., have only a set number of years of "useful life," and at the end of that time are worth nothing as assets. Accountants record depreciation by allocating part of the cost of an asset that will be used up over each year of its life.

Equity: Ownership of the company and/or property. In broadcasting, equity is often built out of debt as the loans are paid off and a station continues to generate cash flow and profits. The largest amount of equity is usually achieved when a profitable station is sold, especially if the station has appreciated in value during the ownership period.

Facility Fee: The charges by banks for processing a loan. The fees usually range from 0.5% to 1% of the loan principal.

Homes Passed: The number of homes that have the option of subscribing to a cable broadcast service.

Leverage: A term used to describe the financial strategy and structure of an acquisition. The borrower uses debt financing to "leverage" the increased equity position in the station over time.

MSA or Metro: Metropolitan Statistical Area, or the official U.S. Census Bureau designation of a market by size. The rating firms use both terms in their reports.

Margins: A measure of profits, generally Cash Flow, divided by net revenues. It is an important indicator of station operating performance. Margin analysis should also be made on the station's pre-tax profits.

Mezzanine Financing: The middle layer of capital -- between senior debt and owner's equity. Mezzanine financing is subordinated debt, and may include a combination of financial instruments, including preferred stock, warrants, convertible securities, bonds and seller financing.

Moratorium: A period in a payment schedule whereby repayment of the principal balance is not required. Moratoriums usually last six months to two years, during which time interest on the unpaid loan balance is paid by the borrower.

Music License Fees: The fees that broadcasters pay to the companies that represent the writers of music. The three leading music license companies are American Society of Composers, Authors, and Publishers (ASCAP), Broadcast Music, Inc. (BMI), and Society for European Stage Authors and Composers (SESAC), with ASCAP and BMI dominating the field. SESAC concentrates on international licensing rather than U.S. licensing. The fees generally range from 2%-4% of station annual net revenues.

Net Revenues: Total advertising revenues less commissions to advertising agencies and station representatives, plus revenues other than Time Sales. All profit margins are based on net revenues.

Present Value: The current value of a dollar to be earned at a point in the future. Often called "discounting," present value is an important financial analysis technique used to compare different investment opportunities.

Prime: The rate of interest charged by commercial banks on loans to their best corporate customers. Lenders will often set a borrower's interest rate a point or more above the prime rate. For example, if the prime goes up, by one percentage point the interest charged on the loan will also increase by one percentage point.

Ranked Markets: These are cities and surrounding areas designated as "markets" by the U.S. Census Bureau. These markets are rated and ranked by the leading broadcast rating and research firms such as Arbitron and Birch.

Rating: A percent of the total population listening to a radio station. A rating can be expressed either in "average quarter hour" or "cume."

Recapitalization: Restructuring the debt and equity capital sources used by a company. It also means to revalue assets at the time of purchasing a radio station to reflect their market and replacement value.

Senior Debt: The lender who has first claim to the assets of a borrower in a default or bankruptcy situation. Banks generally take a senior position in the loans that they make.

Subordinated Debt: The lenders who have second claim -- after the senior lenders -- to a borrower's assets in a default situation.

Subchapter S Corporation: A corporate structure governed by a section of the Internal Revenue Code that allows certain small businesses to be taxed at the rates applicable to partnerships and individual proprietorships -- which are lower than the rates that apply to corporations. Net taxable income or loss in a Subchapter S corporation flows through directly to the shareholders' individual tax situations, and is not subject to taxation before income at the corporate level.

TSA: Total Survey Area, or the area designed around radio listening patterns. It always includes the metro and generally also includes every ADI county. Counties can be in more than one TSA.

12+: Listeners aged twelve and over, or the broadest category of listening ratings reported by the rating firms. It is more important for a station to be a leader in its target listening demographic -- such as Women 18-34 -- than it is to be a leader 12+. Most radio advertising is bought on the basis of narrow demographic cells, and not on 12+ ratings.

Warrant: A long-term option to buy a stated number of shares of common stock at a specified price.

Working Capital: The amount of current assets (assets on hand or expected to be received in cash within one year) -- less the current liabilities (debts to be paid within one year). Broadcasters need to be concerned with not only a station's purchase price, but also the working capital needs of the station during its first year of operation. The rule of thumb is to have financing available for 115% of the station's purchase price.

Endnotes

Introduction

1. Radio Advertising Bureau, Inc. (1989). *Radio Facts For Advertisers, 1989-1990.* (pp. 3-12). New York, NY.

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National Association of Broadcasters
1771 N Street, NW, Washington, DC 20036-2891

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